



# External Report 3

Aboriginal and Islander Community  
Controlled Health Services Clinical  
Excellence (ACE) Program

Data Management Unit - Preventative Health Unit

April  
2014

			
		<p>The mission of QAIHC is to advocate for and provide effective and efficient corporate and health service support to CCHS and communities to facilitate access to primary health care responsive to the local community needs and integrated into the health of Queensland.</p>	
			

## Table of Contents

EXECUTIVE SUMMARY .....	5
INTRODUCTION .....	8
REPORT CONTENT .....	8
METHODS .....	8
MONITORING PERFORMANCE .....	9
Screening Gaps.....	9
Treatment Gaps .....	9
Team Management Gaps .....	9
DEFINITIONS.....	10
ACRONYMS.....	11
SECTION I    PROFILE OF SERVICES.....	12
1.1    Map of QAIHC AICCHS Members, 2014.....	12
1.2    Service Context.....	13
1.3    Recent and Regular Patient Numbers for QAIHC Services .....	14
1.4    Service Contact Totals for QAIHC Service that submitted data .....	15
1.5    Service Contacts by Staff Category for QAIHC Services .....	16
1.6    Child, Adult and Regular Patients Aggregated by Indigenous Status.....	17
1.7    Indigenous Clients Aggregated by Sex, Age Groups and Regular Patients .....	18
SECTION II    OVERALL TRENDS.....	19
2.1    Indigenous Adult Patients with Current Health Assessments.....	19
2.2    Completeness of Recording Risk Factors for Indigenous Adult Patients .....	20
2.3    Risk Factor Outcomes for Indigenous Adult Patients.....	21
2.4    Clinical Management of Indigenous Adult Hypertensive Patients .....	22
2.5    Clinical Management of Indigenous Adult Patients with Type 2 Diabetes .....	23
2.6    Tobacco Use .....	24
2.7    Alcohol Consumption Recording .....	25
2.8    At Risk Alcohol Consumption .....	26
2.9    BMI Outcome by Gender.....	27
3.0    eGFR Outcome .....	28
3.1    Antenatal Care Delivery .....	29
3.2    Underheight and Underweight Children Aged Less Than 5 years; Underweight and Overweight Children and Adolescents Aged 5-14 years .....	30
REFERENCE LIST .....	31
APPENDIX 1 – HISTORY of the ACE Program .....	32
APPENDIX 2 – Queensland data of services involved in the ACE program (Jan 2014) .....	33

## **SUGGESTED CITATION**

Queensland Aboriginal and Islander Health Council 2014. External Report 3 – Aboriginal and Islander Community Controlled Health Services Clinical Excellence (ACE) Program, Data Management Unit, Preventative Health Unit.

## **ACKNOWLEDGEMENTS**

QAIHC Preventative Health Unit would particularly like to thank the 18 AICCHS and 2 mainstream services that have provided their data for this report.

## EXECUTIVE SUMMARY

From October 2009 to January 2014, AICCHS sending monthly data for the QAIHC Core Indicators increased from 5 to 20. In January 2014, 51,568 Indigenous patients or 33% (1 in 3) of Indigenous Queenslanders had been seen at QAIHC services at least once over the previous 2 year period (based on all Indigenous patients as a proportion of ABS 2011 census data). This report is derived from the data supplied by services for the QAIHC core indicators. Data for this report was measured over time up until January 2014. Data is based on Regular Indigenous patients, extracted in January 2014 from 16 AICCHS and 2 mainstream services unless otherwise stated. For a breakdown of patient demographics for AICCHS, mainstream services and MMEx services that submitted data please see Appendix 2.

### Queensland data of services involved in the ACE program

<b>All Patients*</b> <b>75,123**</b>	<b>Recent Patients</b> <b>43,518</b>	<b>Regular Patients<sup>#</sup></b> <b>33,461</b>
<b>Indigenous</b> <b>51,568 (69%)</b>	<b>Indigenous</b> <b>30,733 (71%)</b>	<b>Indigenous<sup>#</sup></b> <b>24,300 (73%)</b>
Non-Indigenous 20,837 (28%)	Non-Indigenous 12,516 (29%)	Non-Indigenous <sup>#</sup> 9,161 (27%)

\*All patients is at least 1 visit in 2 years

\*\*Includes Indigenous Status not stated =2,718 (4%)

<sup>#</sup>MMEx data not available for Regular Patients

### Demographics of Regular Patients<sup>#</sup>

<b>Regular Patients</b> <b>33,461</b>	<b>Regular Indigenous Patients</b> <b>24,300</b>	<b>Regular Indigenous Adult Patients</b> <b>16,503</b>
<b>Indigenous</b> <b>24,300 (73%)</b>	<b>Adults</b> <b>16,503 (68%)</b>	<b>Female</b> <b>9,697 (59%)</b>
Non-Indigenous 9,161 (27%)	<b>Children</b> <b>7,797 (32%)</b>	<b>Male</b> <b>6,806 (41%)</b>

Child: 0-14 years of age. Adult: 15 years of age and above.

<sup>#</sup>MMEx data not available for Regular Patients

### From May 2013 to January 2014 the number of:

- All patients increased by 21,326
- All Indigenous patients increased by 10,638
- Recent patients increased by 12,284
- Recent Indigenous patients increased by 6,057
- Regular<sup>#</sup> Patients increased by 7,395
- Regular<sup>#</sup> Indigenous patients increased by 3,082

### **Achievements in Recording Patient Data and Risk Factors: Looking After Adults**

- 15,240 (92%) were screened for smoking
- 10,569 (76%) were screened for alcohol consumption
- 12,602 (76%) had their height and weight measurement recorded
- 8,278 (63%) patients aged 15 to 54 years had a current health check billed
- 2,467 (75%) patients aged 55 years and older had a current health check billed
- 2,132 (80%) Type 2 Diabetic patients had HbA1c levels recorded
- 14,258 (86%) had their BP levels recorded in the last 12 months
- 3,053 (85%) hypertensive patients had their BP levels recorded in the last 6 months
- 2,718 (76%) hypertensive patients were prescribed best practice medication

### **Outcomes and Clinical Care: Workload and Health Status of Adults**

- 7,442 (49%) were smokers
- 5,182 (49%) were 'at risk' alcohol users
- 3,414 (27%) were overweight and 5,115 (41%) were obese
- 2,658 (16%) were Type 2 diabetics
- 3,578 (22%) were diagnosed with hypertension

### **Areas for Improvement:**

- 1,368 (51%) Type 2 Diabetic patients had a GPMP
- 521 (46%) CHD patients had a GPMP
- 5,648 (34%) had their eGFR (blood test) checked
- 8,529 (68%) adults attending AICCHS are overweight or obese
- 4,459 (27%) adults had their waist circumference measured
- 873 (5%) had their physical activity levels recorded appropriately

### **Achievements in Recording Patient Data: Looking After Kids**

- 2,312 (57%) children aged 0 to 5 years had a health check billed
- 2,379 (63%) children aged 6 to 14 years had a health check billed
- 2,131 (63%) children 0 to 5 years had their height measurement recorded
- 2,366 (70%) children 0 to 5 years had their weight measurement recorded
- 2,402 (55%) children aged 5 to 14 had their weight and height measurements recorded

### **Outcomes and Clinical Care: Workload and Health Status of Kids**

- 603 (28%) were underheight (aged less than 5 years)
- 256 (11%) were underweight (aged less than 5 years)
- 176 (7%) were underweight (aged 5 to 14 years)
- 505 (21%) were overweight (aged 5 to 14 years)
- Every child needs both their weight and height checked every visit

### **Maternal and Child Health Areas for Improvement:**

- 291 Indigenous women gave birth during the reporting period
- 172 (59%) mothers attended at least one antenatal care visit at the service

- 79 (27%) mothers attended antenatal care within the first 13 weeks of pregnancy
- 97 (33%) mothers attended 4 or more antenatal care visits
- There were 3,905 births to Indigenous mothers in Queensland (ABS, 2011)
- There were 5,256 Aboriginal and Torres Strait Islander births in Queensland (ABS, 2011)

### Performance of Participating Services:

QAIHC core indicator data reflect significant improvements by health services that are submitting data as part of the ACE program. Performance was:

	Excellent	Very Good	Good	Fair	Poor
<b>Screening</b>	Tobacco use Blood pressure Hypertension BP	BMI HbA1c levels Alcohol use			eGFR levels Waist check
<b>Treatment</b>		Best practice meds			
<b>Team Management</b>	55+ yrs health checks	15-54 yrs health checks 6-14 yrs health checks	0-5 yrs health checks Diabetes GPMP	CHD GPMPs	

### What has been tracking up?

From February 2013 to January 2014:

#### Screening

- Adults screened for smoking increased from 90% to 92% (p.20)
- Adults screened for alcohol consumption increased from 73% to 76% (p.20)
- Type 2 Diabetic patients HbA1c levels recorded increased from 77% to 80% (p.20)
- Adults eGFR (blood test) checked increased from 32% to 34% (p.20)
- Adults with a waist circumference measurement increased from 25% to 27% (p.20)
- 5 to 14 years with weight and height measurements recorded increased from 51% to 55% (p.30)

#### Treatment

- Hypertensive patients prescribed best practice medication increased from 68% to 76% (p.22)

#### Team Management

- Type 2 Diabetic patients with a GPMP increased from 48% to 51% (p.23)
- CHD patients with a GPMP increased from 43% to 46% (p.22)
- 15 to 54 years health check billed increased from 56% to 63% (p.19)
- 55+ years health check billed increased from 67% to 75% (p.19)
- 0 to 5 years health check billed increased from 54% to 57% (p.19)
- 6 to 14 years health check billed increased from 60% to 63% (p.19)

## INTRODUCTION

The burden of morbidity, chronic disease and injury remains high in Aboriginal and Torres Strait Islander people in Australia. The Australian Government has made a significant commitment to reducing this disadvantage with its 'Closing the Gap' reform, setting targets for closing the life expectancy gap within a generation and halving mortality rates for children under 5 years of age within a decade. While education, housing and employment are significant contributors to this health disparity, the role of primary health care services, whether Aboriginal and Islander Community Controlled Health Services (AICCHS), community health services or general practices, is also important and a significant component of the effort to close the gap.

QAIHC has, as a priority, recognised the need to build the evidence base to support increased and continued investment within the Aboriginal and Torres Strait Islander health services sector in Queensland. The functions of the DMU are to:

- (i) improve the quality, utility and value of clinical information and information systems,
- (ii) to build capacity within the Sector for the ongoing analysis, monitoring and reporting of health data
- (iii) to provide reports and analyses in support of the QAIHC strategic goals and to support quality improvement within individual services.

This report provides a comprehensive report on the performance of the Queensland Community Controlled Health Sector and on the health status of its clients. The report demonstrates the achievements and improvements in performance of the sector as a whole. This report may be used to identify possible gaps, areas and opportunities for improvement, for sector planning processes and meet the accountability requirements of funding agencies.

## REPORT CONTENT

**Section I** provides a basic profile of Aboriginal and Torres Strait Islander patients as well as non-Indigenous patients seen in primary health care services overall over the past two years. The graphs examine Aboriginal and Torres Strait Islander patients aggregated by age group, sex and Indigenous status for QAIHC services.

**Section II** provides a time trend picture of the performance of the sector as a whole. It demonstrates the performance of the Aboriginal and Torres Strait Islander primary health care services overall over the past two years. The graphs examine key areas such as the proportion of clients who have had health checks performed, the prevalence and recording of key risk factors and the management of patients with heart disease and diabetes.

## METHODS

This report is derived from the data supplied by services for the QAIHC key indicators (see Appendix 1). The majority of the data for this report was measured in January 2014, as it was the most complete set. Data is extracted monthly from EMRs and submitted to a web based portal for services to review their performance over time and benchmarked. The data is also sent to the QAIHC data repository to allow



agreed secondary analysis to occur. Only aggregated data is submitted by services so individual clients can never be identified and all services are de-identified. Services may view the graphs of the time trends for their own individual data by accessing the QAIHC / QIconnect web portal and can use this to monitor their own service quality improvement in detail.

Data for this report was measured over time up until January 2014. Data is based on Regular Indigenous patients, extracted in January 2014 from 16 AICCHS and 2 mainstream services unless otherwise stated. MMEx services are unable to submit data for Regular patients. For a breakdown of patient demographics for AICCHS, mainstream services and MMEx services that submitted data please see Appendix 2.

QAIHC reports on Regular patients as it allows for consistent reporting over time. The all patient category indicates much higher patient numbers but the definition of the all patient category changes and varies service by service due to the option of including or excluding archived and deceased patients. For example, the Communicare CAT link extracts all archived patients in the *All* patient category, substantially increasing the apparent number of patients seen by services operating Communicare as their patient record system.

## MONITORING PERFORMANCE

QAIHC has set screening, treatment and team management criteria for assessing performance of the Sector as a whole.

Screening Gaps		
Patients not screened	Patients screened	Performance
< 15%	> 85%	Excellent
15-25%	75-85%	Very good
25-35%	65-75%	Good
35-50%	50-65%	Fair
> 50%	< 50%	Poor
Treatment Gaps		
Patients not treated	Patients treated	Performance
< 15 %	> 85 %	Excellent
15-25 %	75-85 %	Very good
25-35 %	65-75 %	Good
35-50 %	50-65 %	Fair
> 50 %	< 50 %	Poor
Team Management Gaps		
Team Management missing	Team Management happening	Performance
< 25%	> 75 %	Excellent
25 - 40 %	60-75 %	Very good
40 - 50 %	50-60 %	Good
50 - 60 %	40-50 %	Fair
> 60 %	< 40 %	Poor

## DEFINITIONS

Indigenous: Aboriginal and/or Torres Strait Islander patients.

A visit: Any patient contact that has been recorded in the progress notes.

Recent patient: A patient who has made 1 visit in the 6 months prior to the date of data extraction and submission.

Regular patient: A patient who has had 3 visits or more in the last 2 years with 1 visit being in the 6 months prior to the date of data extraction and submission. *Regular patients are labelled as recent active patients on the QAIHC report in the PEN CAT tool.*

All patients (From June 2012)\*: All Patients is restricted to patients that have had a visit in the last 2 years. From June 2012 MD and BP users are able to extract archived and deceased patients that have had a visit in the last 2 years. Refer to “Extracting Additional Patients Quick Reference Guide”. If the practice has elected to include archived patients then these will be included in the data provided they still meet the visit criteria. Hence the patient totals will vary depending on your preference selection.

QAIHC Average: For each indicator, the QAIHC average is the sum of the numerators for all services divided by the sum of the denominators for all services. For example for smoking, the sum of the numerators (number of smokers) for all services is 5,818; the sum of the denominators (the population with smoking status recorded) for all services is 11,800. The QAIHC average is 5,818 divided by 11,800 which is 0.49 (49%).

Screening Gaps: This refers to the patients who have been seen by the clinical team and have not been screened for the indicator. For example for smoking, the screening gap is the proportion of patients who were not asked or did not have their information on tobacco use recorded. This should trend to 0% as all patients should be asked about risk factors and have their information updated regularly.

Treatment Gaps: Patients who should be on a particular treatment but are not. This applies to the hypertension indicator only which assesses how many people identified as having hypertension and are on an ACE or AR2 medication. This should trend to 0% as nearly all patients should be on the correct medication.

Team Management Gaps: This refers to care of people with a chronic disease, as well as team input in terms of preventive health checks and GP management plans being completed.

SEIFA: The Socio-Economic Index For Areas 2006 (SEIFA) is derived from the 2006 Census of Population and Housing, and provides a range of measures to summarise aspects of the level of socio-economic wellbeing in an area. These measures include: advantage / disadvantage; economic resource; and education / occupation.

BMI: Body Mass Index is calculated from  $\text{Weight (kg)} / [\text{Height (m)}]^2$

\*Previous All patients definition: All patients who have a record in the source system and have not been flagged as ‘inactive’ or ‘archived’ - Communicare CAT link extracts all archived patients in the *All* patient category, substantially increasing the apparent number of patients seen by services operating Communicare as their patient record system.

## ACRONYMS

ACE Program: Aboriginal and Islander Community Controlled Health Services Clinical Excellence Program

ACR: Albumin to Creatinine Ratio

AICCHS: Aboriginal and Islander Community Controlled Health Service

APCC: Australian Primary Care Collaborative

BMI: Body Mass Index

BP: Blood Pressure

BS: Blood Sugar

CAT tool: PEN Clinical Audit Tool

CQI: Continuous Quality Improvement

eGFR: Glomerular Filtration Rate

EMR: Electronic Medical Record

GPMP: GP Management Plan

HbA1c: Blood glucose concentration. Also known as A1c, glycohaemoglobin and glycated haemoglobin.

IF: Improvement Foundation

MBS: Medical Benefits Schedule

MD: Medical Director

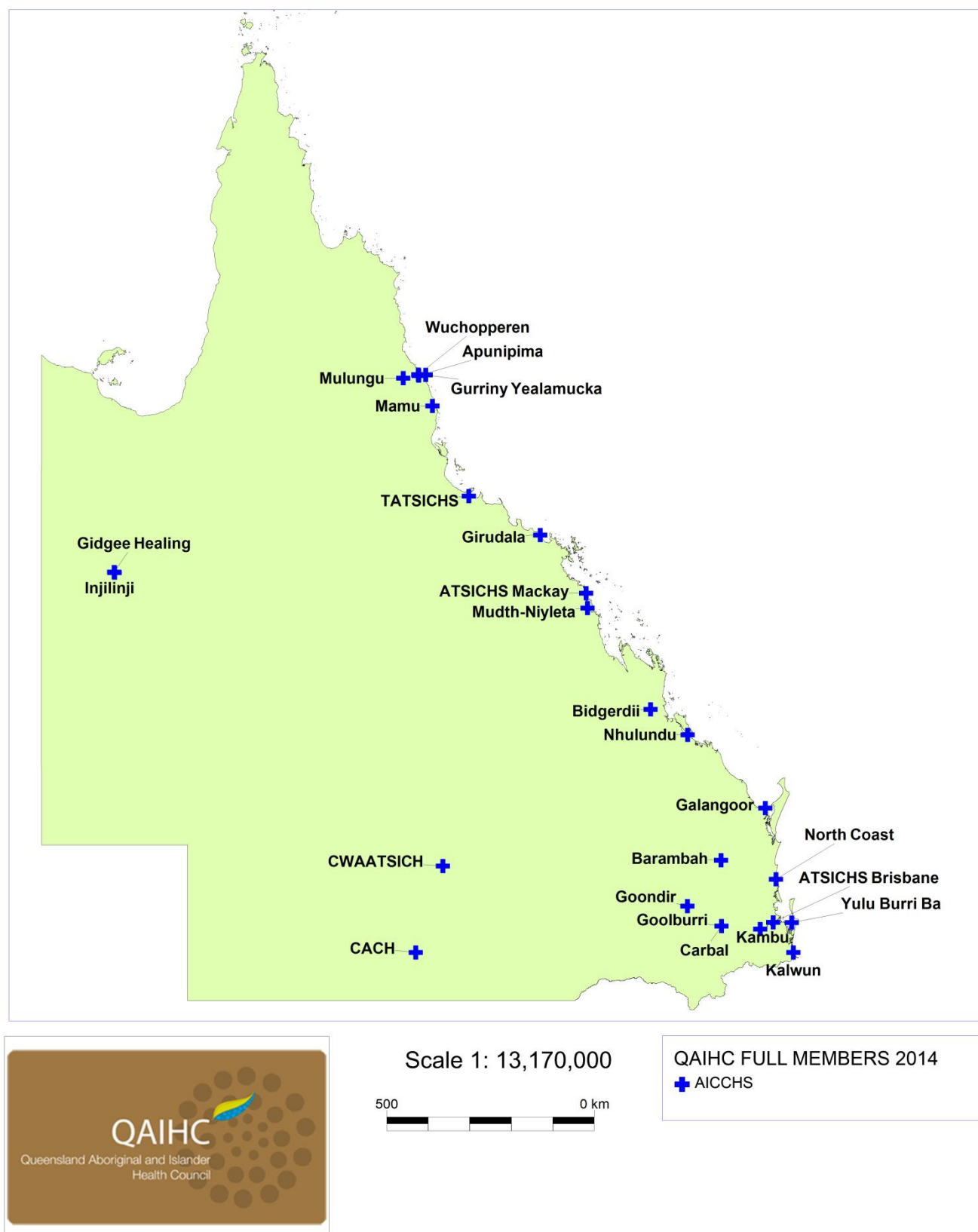
Pracsoft: Practice Management system: for billing and appointments

QAIHC: Queensland Aboriginal and Islander Health Council

SNAP: Smoking, nutrition and physical activity

## SECTION I PROFILE OF SERVICES

### 1.1 Map of QAIHC AICCHS Members, 2014



06/02/2014

QAIHC Preventative Health Unit, Data Management Unit

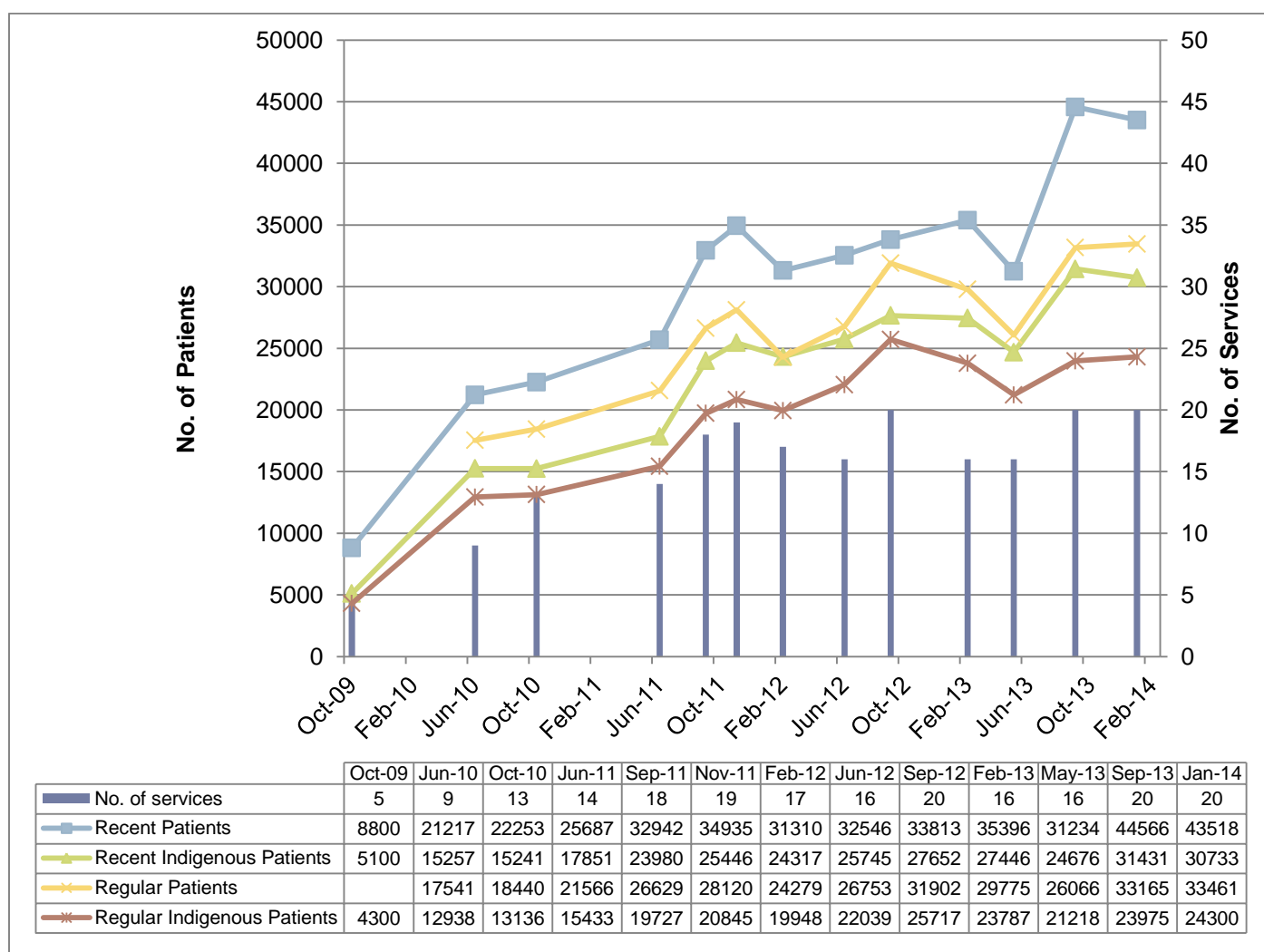
## 1.2 Service Context

Services	Location	QAIHC region	Service Size <sup>1</sup>	Remoteness Area <sup>2</sup>	FTE Docs	SEIFA score <sup>3</sup>	Medical Software
Bidgerdii	Rockhampton	Central Queensland	Medium	Inner Regional	2	919	Best Practice
Barambah	Cherbourg	Central Queensland	Medium	Outer Regional	1	835	Best Practice
Galangoor	Hervey Bay	Central Queensland	Medium	Inner Regional	0	937	MD3, Pracsoft
Nhulundu	Gladstone	Central Queensland	Medium	Inner Regional	2	936	MD3, Pracsoft
Wuchopperen	Cairns	Far North Queensland	Large	Outer Regional	1	956	Communicare
Mulungu	Mareeba	Far North Queensland	Large	Outer Regional	5	916	MD3, Pracsoft
Gurriny Yal	Yarrabah	Far North Queensland	Large	Outer Regional	1	884	MD3, Pracsoft
Mamu	Innisfail	Far North Queensland	Large	Outer Regional	2	928	MD3, Pracsoft
Mamu	Ravenshoe	Far North Queensland	Small	Outer Regional	0	909	MD3, Pracsoft
Apunipima	Mossman Gorge	Far North Queensland	Small	Outer Regional	5	953	Best Practice
TATSICHS	Townsville	North & North West Queensland	Large	Outer Regional	6	985	MD3, Pracsoft
ATSICHS	Mackay	North & North West Queensland	Medium	Inner Regional	2	1006	MD3, Pracsoft
Gidgee <sup>#</sup>	Mount Isa	North & North West Queensland	Large	Remote	1	928	MMex <sup>%</sup>
Girudala	Bowen	North & North West Queensland	Small	Outer Regional	0	969	MD3, Pracsoft
PICC <sup>#</sup>	Palm Island	North & North West Queensland	Small	Remote	*	*	MD3, Pracsoft
Goolburri	Toowoomba	South & South West Queensland	Small	Inner Regional	*	*	Best Practice
Goondir <sup>#</sup>	Dalby	South & South West Queensland	Large	Inner Regional	*	*	Communicare
Carbal <sup>#</sup>	Toowoomba	South & South West Queensland	Large	Inner Regional	3.2	972	Best Practice
CWAATSICH	Charleville	South & South West Queensland	Medium	Remote	2	979	MD3, Pracsoft
CACH <sup>#</sup>	Cunnamulla	South & South West Queensland	Small	Very Remote	*	*	MD3, Pracsoft
ATSICHS	Brisbane	South East Queensland	Large	Major City	10	993	MD3, Pracsoft
Kalwun	Miami	South East Queensland	Medium	Major City	4	1011	MD3, Pracsoft
Kambu <sup>#</sup>	Ipswich	South East Queensland	Medium	Major City	4	943	MMex <sup>%</sup>
Yulu Burri Ba <sup>#</sup>	Dunwich	South East Queensland	Medium	Remote	2	1028	MMex <sup>%</sup>
RFDS	Charleville	Not Allocated	Small	Very Remote	*	*	MD3, Pracsoft
HWB	Townsville	Not Allocated	Medium	Outer Regional	3.5	991	MD3, Pracsoft

<sup>#</sup>Patient data is unavailable for these services as at January 2014. <sup>%</sup>Services using MMEx are unable to submit data for regular patients to QAIHC.

<sup>1</sup>Service size was determined by regular Indigenous Patients measured in January 2014. Small is less than 500, Medium is 500 to 1,500 and large is > 1,500. The number of Indigenous patients seen in each service varies greatly and reflects the service size and location. <sup>2</sup>Remoteness Area (RA) represents an aggregation of geographical areas which share common characteristics of remoteness. <sup>3</sup>SEIFA score - uses all patients figure for top 10 postcodes. For more information check your Practice Health Atlas (PHA).

### 1.3 Recent and Regular Patient Numbers for QAIHC Services



Proportion of recent and regular patients over time and the number of services submitting data

#### Results:

- In January 2014: 30,733 Indigenous patients (20% of Indigenous Queenslanders)\* had been seen at QAIHC services over the previous 6 month period.
- AICCHS sending monthly data for the QAIHC Core Indicators has increased from 5 to 20.
- The number of recent patients, Indigenous and non-Indigenous, for whom data was captured increased from 8,800 to 43,518.
- The number of recent Indigenous patients for whom data was captured increased from 5,100 to 30,733.
- The number of regular patients, Indigenous and non-Indigenous, for whom data was captured increased from 17,541 to 33,461.
- The number of regular Indigenous patients for whom data was captured increased from 4,300 to 24,300.

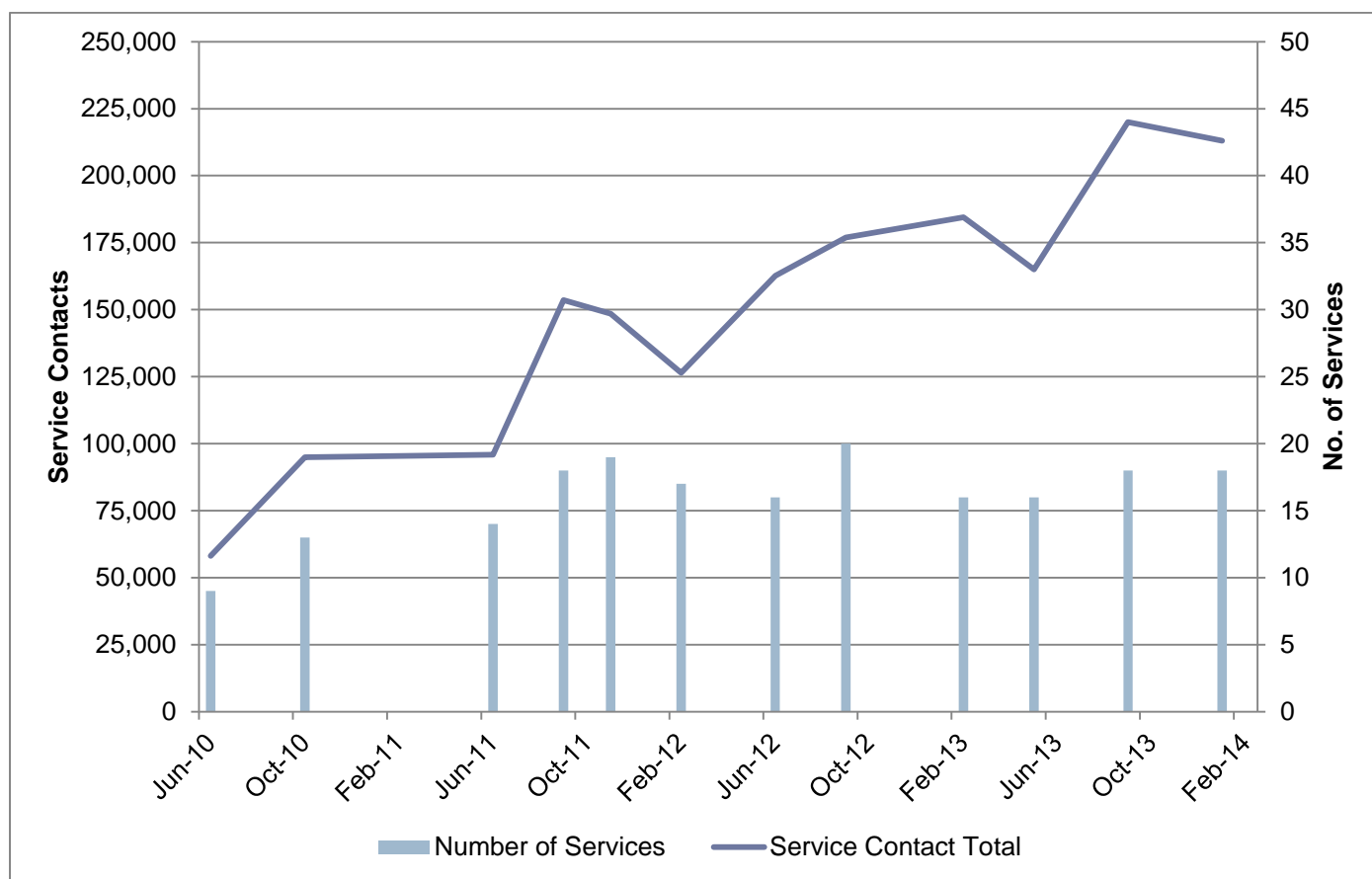
\*Based on recent Indigenous patients as a proportion of ABS 2011 census data

Recent patient: A patient who has made 1 visit in the 6 months prior to the date of data extraction and submission.

Regular patient: A patient who has had 3 visits or more in the last 2 years with 1 visit being in the 6 months prior to the date of data extraction and submission. Regular patients are referred to in CAT as “recent active” patients.

MMEx data not available for Regular Patients

## 1.4 Service Contact Totals for QAIHC Service that submitted data



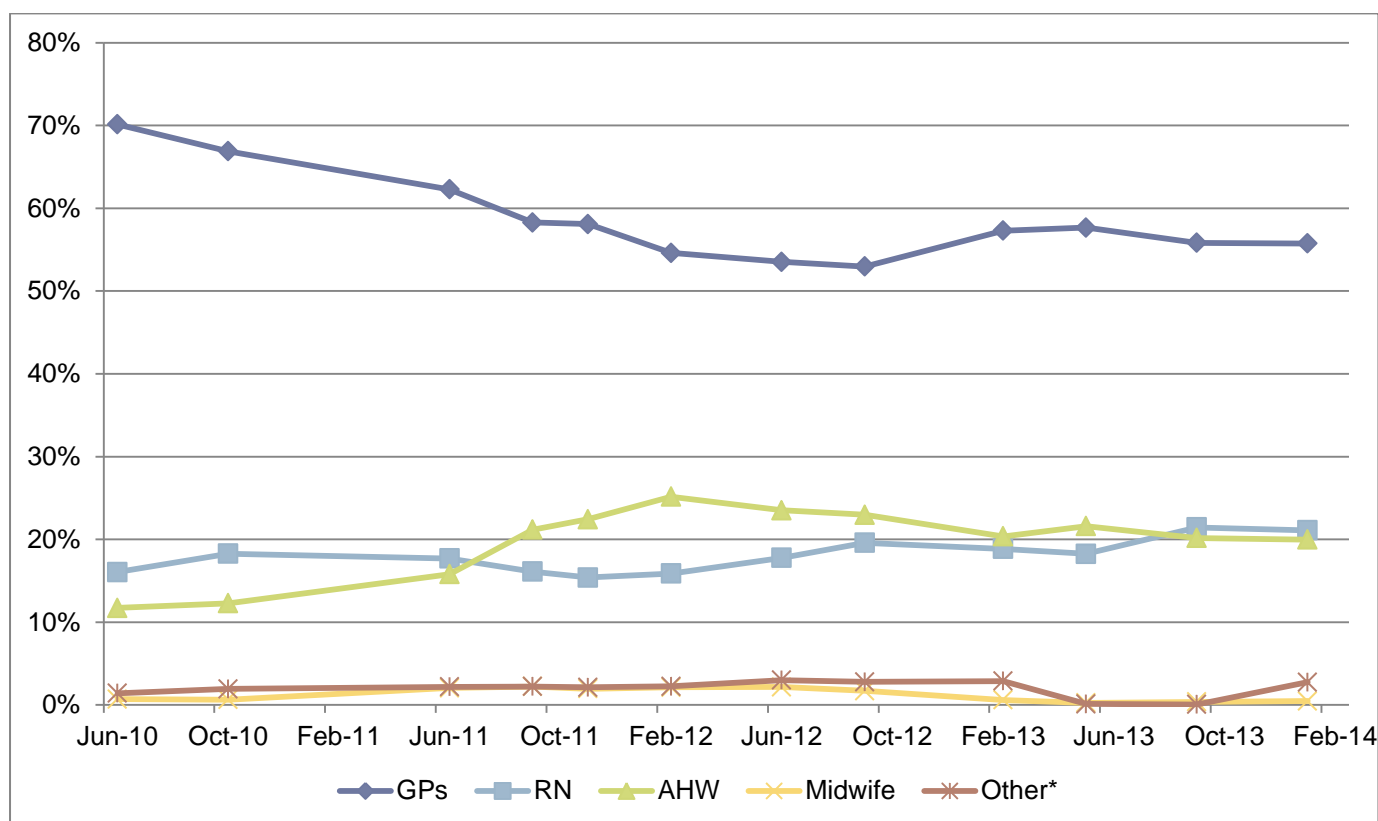
Number of service contacts for regular Indigenous and Non-Indigenous patients over time

### Results:

- At January 2014, the service contact total for all regular patients was 212,998
- Despite the variation in the number of services submitting data, there is an increasing number of service contacts for AICCHS in Queensland

## 1.5 Service Contacts by Staff Category for QAIHC Services

Numbers and proportions of contacts with client groups by staff category is a measure of access, workload and staffing.



Proportion of service contacts for regular Indigenous and Non-Indigenous patients over time

### Results:

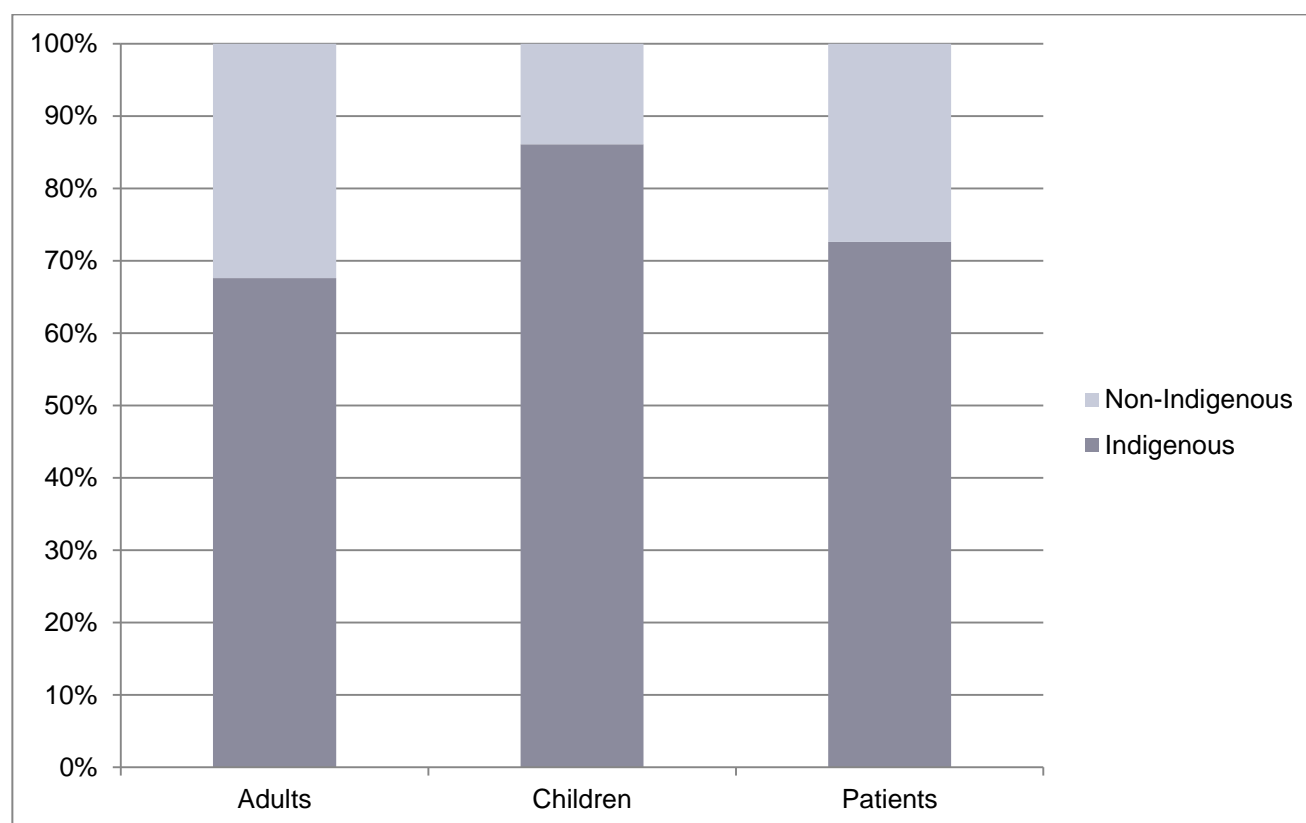
- At January 2014, the service contact total for all regular patients was 212,998
- Of the 212,998 service contacts,
  - 118,738 (56%) were seen by GPs
  - 42,524 (20%) were seen by AHWs
  - 44,924 (21%) were seen by RNs
  - 966 (0%) were seen by Midwives
  - 5,846 (3%) were seen by Other\*

\*Other includes contacts with dietitians, podiatrists, psychologists and medical students.

QAIHC-102 GPs Service contacts; QAIHC-103 \*Dietitian Service contacts; QAIHC-104 Midwife Service contacts; QAIHC-105 \*Podiatrist Service contacts; QAIHC-106 \*Psychologist Service contacts; QAIHC-107 RN Service contacts; QAIHC-108 AHW Service contacts; QAIHC-109 \*Medical Student Service contacts



## 1.6 Child, Adult and Regular Patients Aggregated by Indigenous Status



Proportion of regular Indigenous and Non-Indigenous child, adult and overall patients

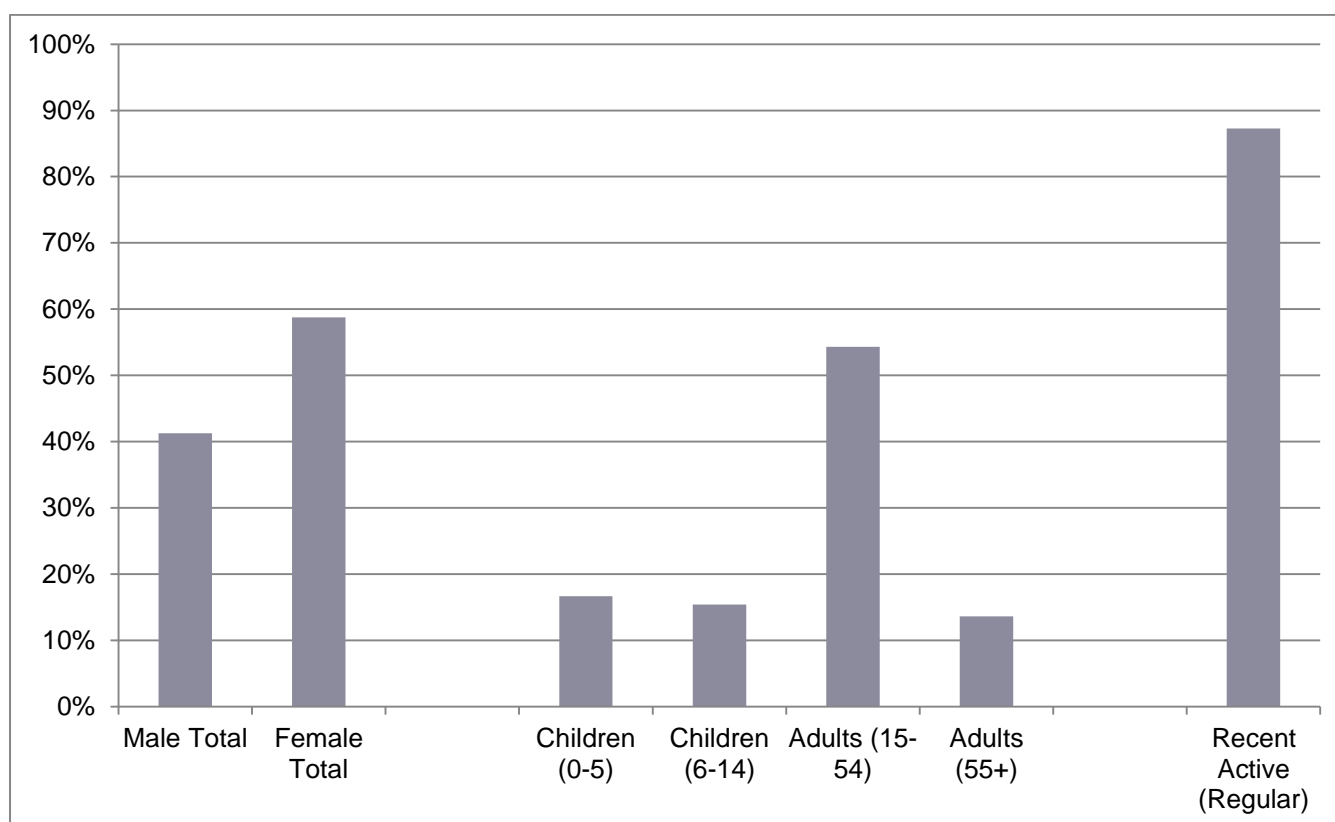
### Results of Regular clients:

- Of 9,055 children seen, 7,797 (86%) were Indigenous and 1,258 (14%) were Non-Indigenous. The proportion of Indigenous children seen varied across services from 19% to 100%
- Of 24,406 adults seen, 16,503 (68%) were Indigenous and 7,903 (32%) were Non-Indigenous. The proportion of Indigenous adults seen varied across services from 12% to 97%
- Of 33,461 patients seen, 24,300 (73%) were Indigenous and 9,161 (27%) were Non-Indigenous. The proportion of Indigenous patients seen varied across services from 13% to 98%

Child: 0-14 years of age; Adult: 15 years of age and above

Regular patient: A patient who has had 3 visits or more in the last 2 years with 1 visit being in the 6 months prior to the date of data extraction and submission. Regular patients are referred to in CAT as “recent active” patients.

## 1.7 Indigenous Clients Aggregated by Sex, Age Groups and Regular Patients



Proportion of regular Indigenous child and adult patients; Proportion of regular Indigenous adult male and female patients; regular Indigenous patients as a proportion of Recent Indigenous Patients

### Results of Regular Indigenous Clients:

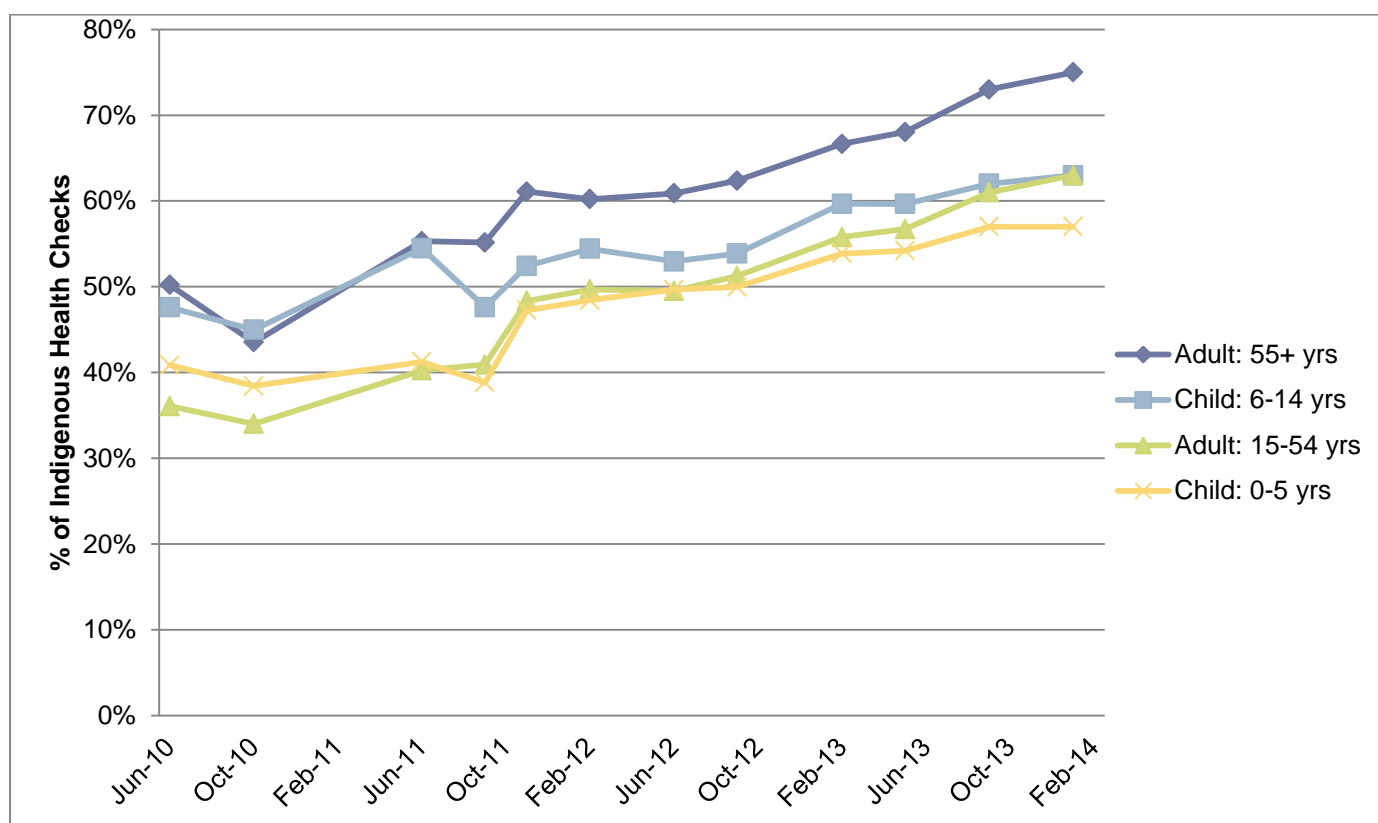
- Of 16,503 adults seen, 6,806 (41%) were male and 9,697 (59%) were female
- Of 24,300 patients seen, 7,797 (32%) were children and 16,503 (68%) were adults
- The proportion of children seen varied across services from 19% to 40%
- The proportion of adults seen varied across services from 60% to 81%
- Of 27,839 recent Indigenous patients seen 24,300 (87%) were regular patients
- The proportion of regular Indigenous patients seen as a proportion of recent Indigenous patients seen varied across services from 80% to 96%

Child: 0-14 years of age. Adult: 15 years of age and above.

Recent patient: A patient who has made 1 visit in the 6 months prior to the date of data extraction and submission. Regular patient: A patient who has had 3 visits or more in the last 2 years with 1 visit being in the 6 months prior to the date of data extraction and submission. Regular patients are referred to in CAT as “recent active” patients.

## SECTION II OVERALL TRENDS

### 2.1 Indigenous Adult Patients with Current Health Assessments



Proportion of regular Indigenous adult patients with current health assessments over time

#### Results of Regular Indigenous Clients:

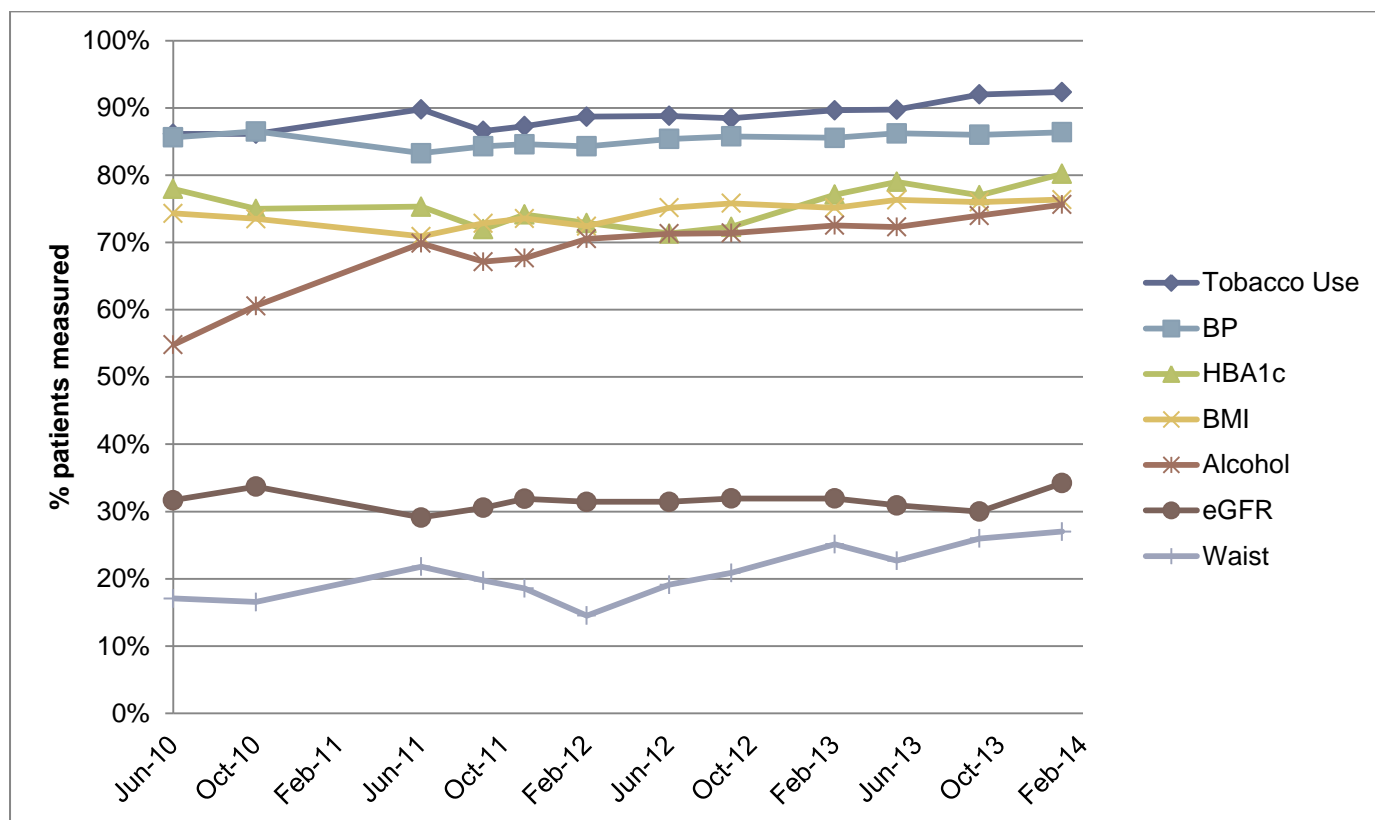
- 8278 adults aged 15 to 54 years had a current health assessment, with a range of 29%-87% among the services.
- 2467 adults aged 55 years and older had a current health assessment, with a range of 23%-91% among the services.
- 2312 children aged 0 to 5 years had a current health assessment, with a range of 22%-86% among the services.
- 2379 children aged 6 to 14 years had a current health assessment, with a range of 15%-94% among the services.
- Over time, there has been a clear increase in the proportion of Aboriginal and Torres Strait Islander clients, both adults and children, who have current health checks.
- This reflects hard work in the services. Possible contributory factors: increased number of participating services and thus total patients represented in the data collection, improved systems of care delivery, participation in the QAIHC led ACE program

#### The Gap: Monitoring Performance: Team Management on Health Checks was:

55 years	- Excellent	15 to 54 years	- Very Good
0 to 5 years	- Good	6 to 14 years	- Very Good

Aboriginal Health Assessment: MBS Item 715. This assessment includes recording SNAP risk factors, BP, BMI and BS. Renal and lipid tests are optional. Aboriginal health assessments for children include review of growth, immunisation and nutritional status. A current health assessment for this indicator is one that has been Medicare billed within 2 years of date of data extract.

## 2.2 Completeness of Recording Risk Factors for Indigenous Adult Patients



Proportion of regular Indigenous adult patients' completeness of recording risk factors over time

### Results of Regular Indigenous Clients:

- **excellent and consistent:** recording of tobacco use
- **excellent and consistent:** recording of blood pressure
- **consistent:** recording of HbA1c levels
- **consistent:** recording of BMI
- **increased:** recording of alcohol use
- **poor:** recording of eGFR levels
- **poor but improving:** recording of waist circumference

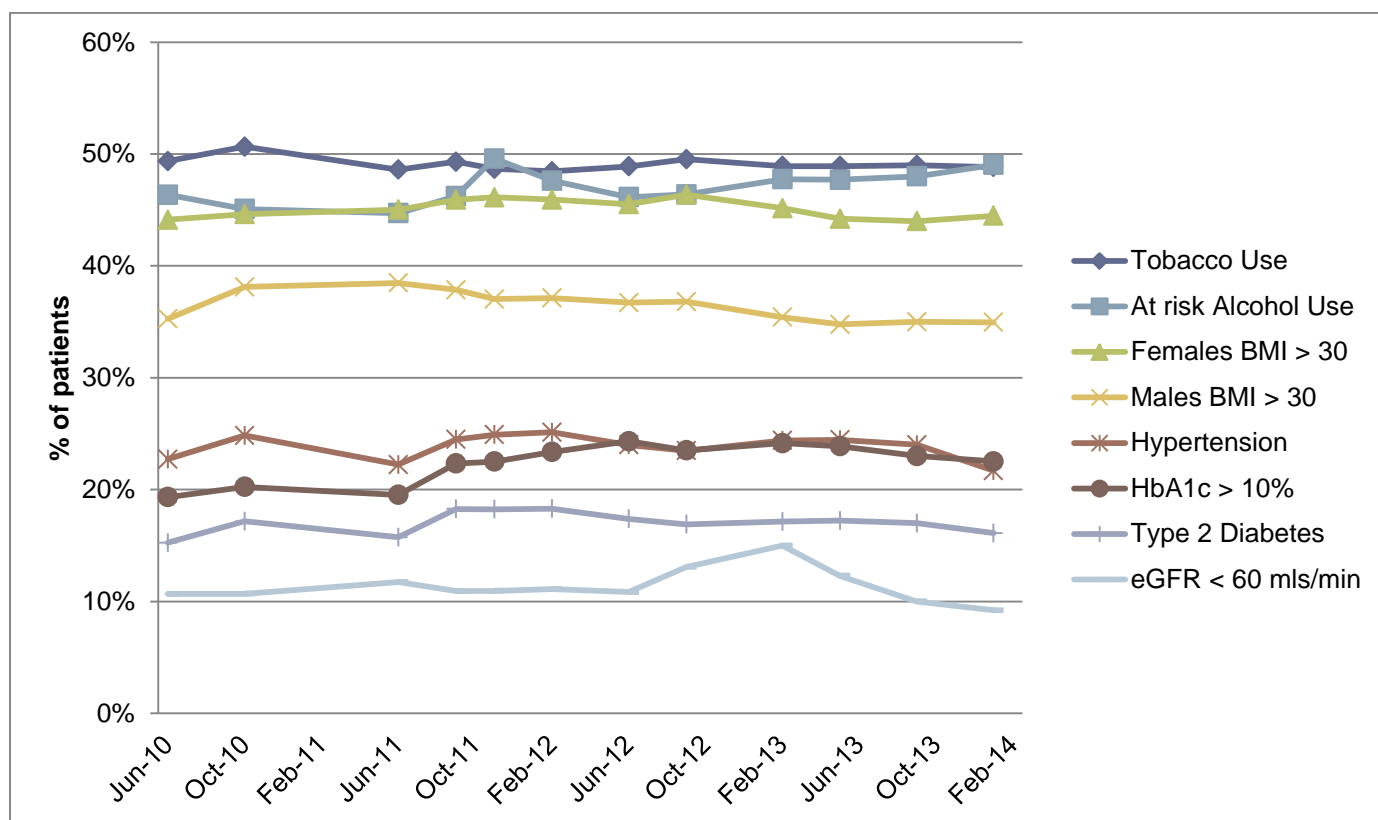
### The Gaps: Monitoring Performance: Screening was:

Tobacco use - Excellent	BMI - Very Good	eGFR levels - Poor
Blood pressure- Excellent	HbA1c levels - Very Good	Waist check -Poor
Alcohol Use - Good		

eGFR: this is not mandatory on all patients; slight downward trend in HbA1C recording may reflect a lag in testing due to an increased identification of diabetics with increased health check activity, and increases in patient numbers in some clinics

Tobacco use is self-reported daily smoking. HbA1c: Blood glucose concentration. Levels are only measured in diabetic patients and are extracted from pathology results. eGFR: Glomerular Filtration Rate is extracted from pathology results; eGFR recorded in the last 6 months. BMI: A Body Mass Index where height and weight measures are recorded in the last 12 months. Alcohol use: Services using Communicare do not have the capability to submit alcohol related information and were therefore excluded. Waist: A waist circumference measurement recorded in the last 12 months.

## 2.3 Risk Factor Outcomes for Indigenous Adult Patients



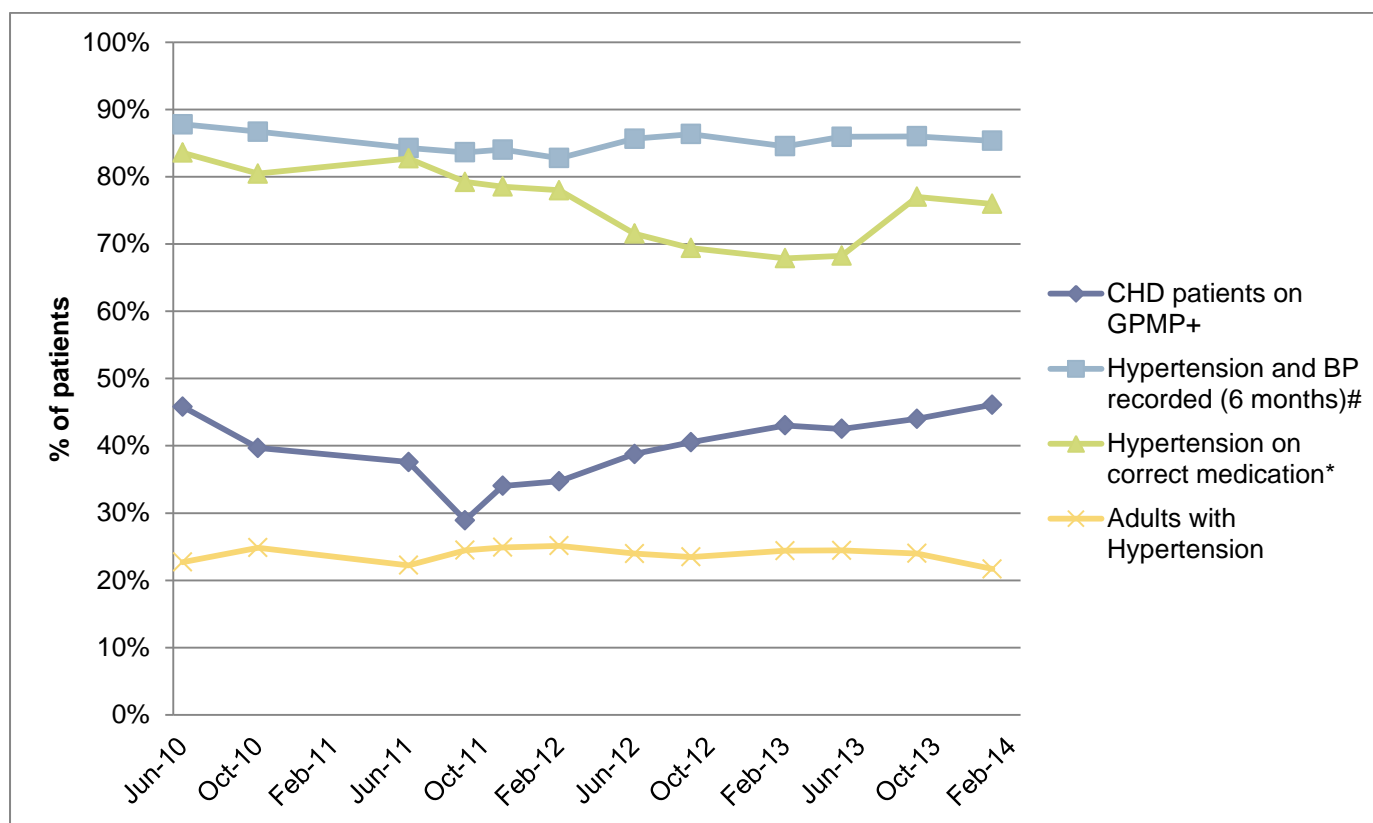
Proportion of regular Indigenous adult patients risk factor outcomes over time

### Results of Regular Indigenous Clients:

- **high and steady:** proportion of patients reporting at risk alcohol use
- **high and steady:** proportion of male and female patients recorded as obese (BMI)
- **increasing:** proportion of Type 2 diabetic patients reported with HbA1c levels >10%
- **a steady:** proportion of patients diagnosed with hypertension
- **a steady:** proportion of patients diagnosed with Type 2 diabetes
- **a steady:** proportion of patients reported with eGFR levels <60 mls/min
- Tobacco use: there may be a small downward trend in the prevalence of current tobacco use. This is encouraging and may reflect the tobacco control efforts in the sector. This data will be closely monitored over the next few years.
- Alcohol use: high proportions of patients with recorded at risk alcohol use may reflect increased health check activity

Tobacco use: is self-reported daily smoking. Alcohol use: A drinker is at risk if they drink > 2 drinks on a regular occasion and/or binge drink (MD only which is currently recorded as >= 6 drinks on any occasion). A Body Mass Index (BMI) of 25 to 30 is classified as overweight; greater than 30 is classified as obese; height and weight recorded in the last 12 months Hypertension: Clinical diagnosis of hypertension recorded in the EMR. HbA1c: HbA1c recorded in the last 12 months. eGFR: Glomerular Filtration Rate is extracted from pathology results; eGFR recorded in the last 6 months. Services using Communicare do not have the capability to submit alcohol related information and were therefore excluded

## 2.4 Clinical Management of Indigenous Adult Hypertensive Patients



Proportion of regular Indigenous adult hypertension patients and their management outcomes over time

### Results of Regular Indigenous Clients:

- Hypertension was identified in a total of 3578 (22%) regular Indigenous adult patients, with a range of 8-34% among the services.
- **an increasing:** proportion of CHD patients on GPMP
- **a decreasing:** proportion of hypertensive patients with blood pressure recorded at 6 months
- **a decreasing:** proportion hypertensive patients on correct medications\*
- **a steady:** proportion of adults with hypertension

#### The Gaps: Monitoring Performance for Hypertension was:

Team Management: CHD patients on GPMP	- Fair
Screening: Hypertensive patients with recorded blood pressure	- Excellent
Treatment: Hypertensive patients on correct medication*	- Very Good

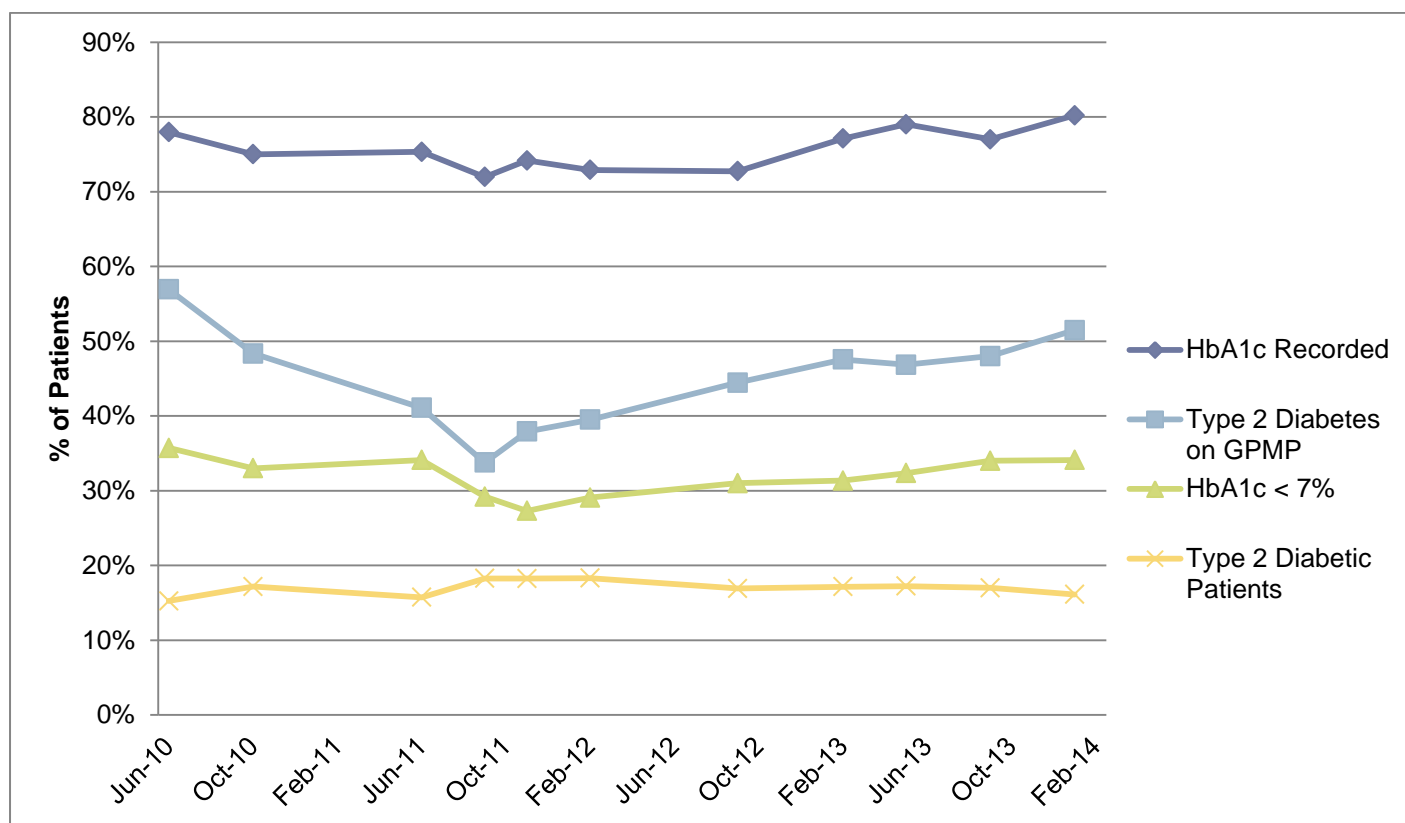
\*Medical Director has changed the classification of Antihypertensive combination products (creating different class codes). These changes were made in the first half of 2012 which accounts for the decrease in best practice medication prescriptions for hypertensive patients. This issue was resolved in July 2013.

+GPMP: General Practitioner Management Plan (Medicare Item721); performed within 1 year of the date of data extraction.

\*Hypertensive patients with a BP recording in the last 12 months and currently prescribed ACE inhibitors or A2 medication.

#Hypertensive patients with a BP recording in the last 6 months

## 2.5 Clinical Management of Indigenous Adult Patients with Type 2 Diabetes



Proportion of regular Indigenous adult Type 2 diabetic patients and their management outcomes over time

### Results of Regular Indigenous Clients:

- Type 2 Diabetes was identified in a total of 2658 (16%) adult patients, with a range in prevalence of 5%-30% among the services. In 2010, diabetes prevalence for Queensland adults aged 25 years and older was estimated that at 11.5% (CHO, 2010).
- **an increasing:** proportion of Type 2 diabetic patients on GPMP since 2011
- **a steady:** proportion of Type 2 diabetic patients with HbA1c levels recorded
- **a decreasing:** proportion of Type 2 diabetic patients with HbA1c levels <7%
- **an increasing:** proportion of Type 2 diabetic patients

### The Gaps: Monitoring Performance for Diabetes was:

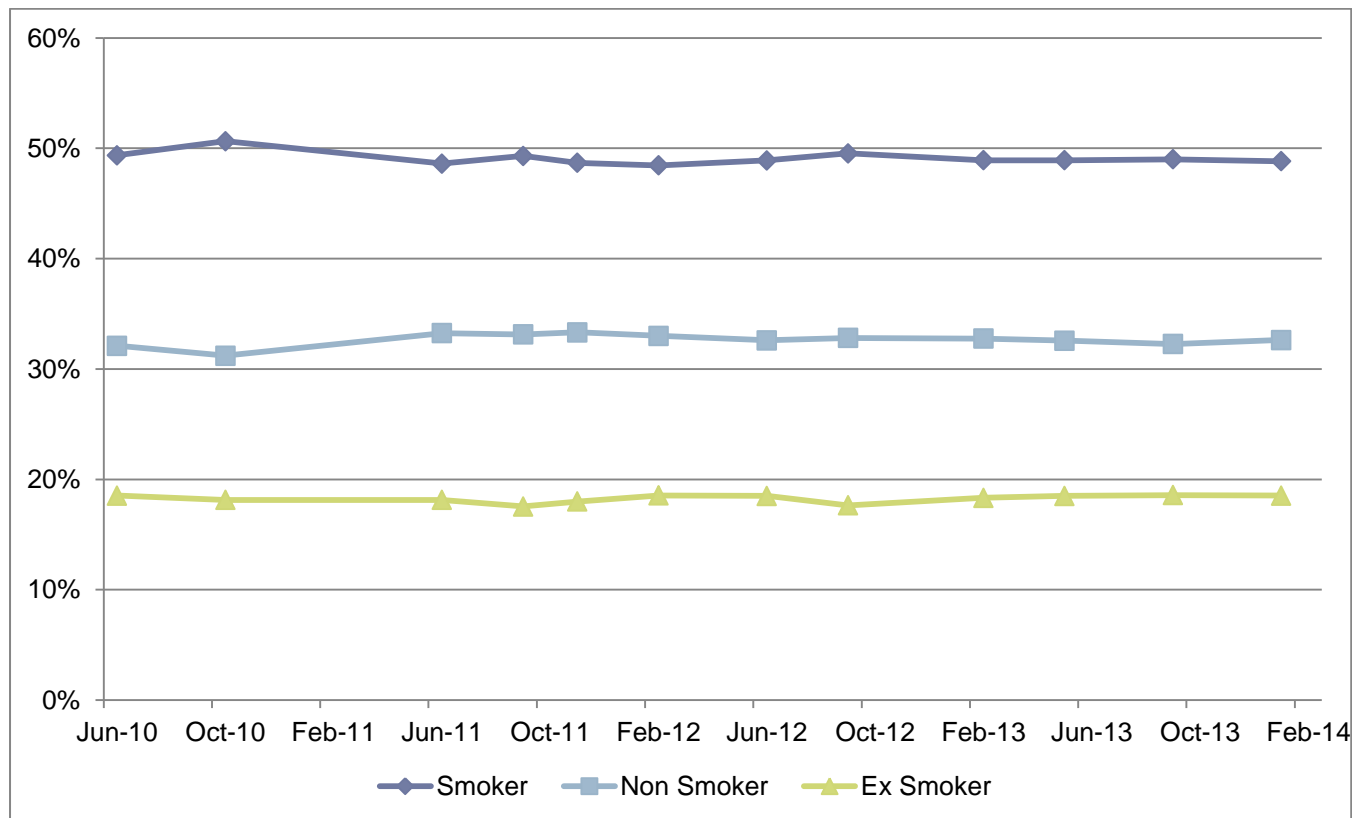
Team Management: Diabetes patients on GPMP - Good

Screening: Type 2 diabetic patients with HbA1c levels recorded - Very Good

GPMP: General Practitioner Management Plan (Medicare Item 721, performed within 1 year of the date of data extraction). HbA1c: Recorded in past 12 months; extracted from pathology results.

## 2.6 Tobacco Use

Tobacco use is the leading contributor to the burden of disease in the Indigenous community, accounting for 12.1% of the total burden (Vos, 2007). Close the Gap nominates a target of an annual reduction of 2% in the prevalence of tobacco use until 2020 (HREOC, 2008). Reduction of smoking rates in the Aboriginal and Torres Strait Islander community is a long term goal requiring the contribution of many stakeholders besides health services.



Proportion of regular Indigenous adult patients by smoking status over time

### Results of Regular Indigenous Clients:

- Of 15,240 adults were screened for smoking, 7442 (49%) were smokers
- Smoking rates varied across services from 38% to 58%
- For all services the smoking rates remain much higher than for the non-Indigenous population.

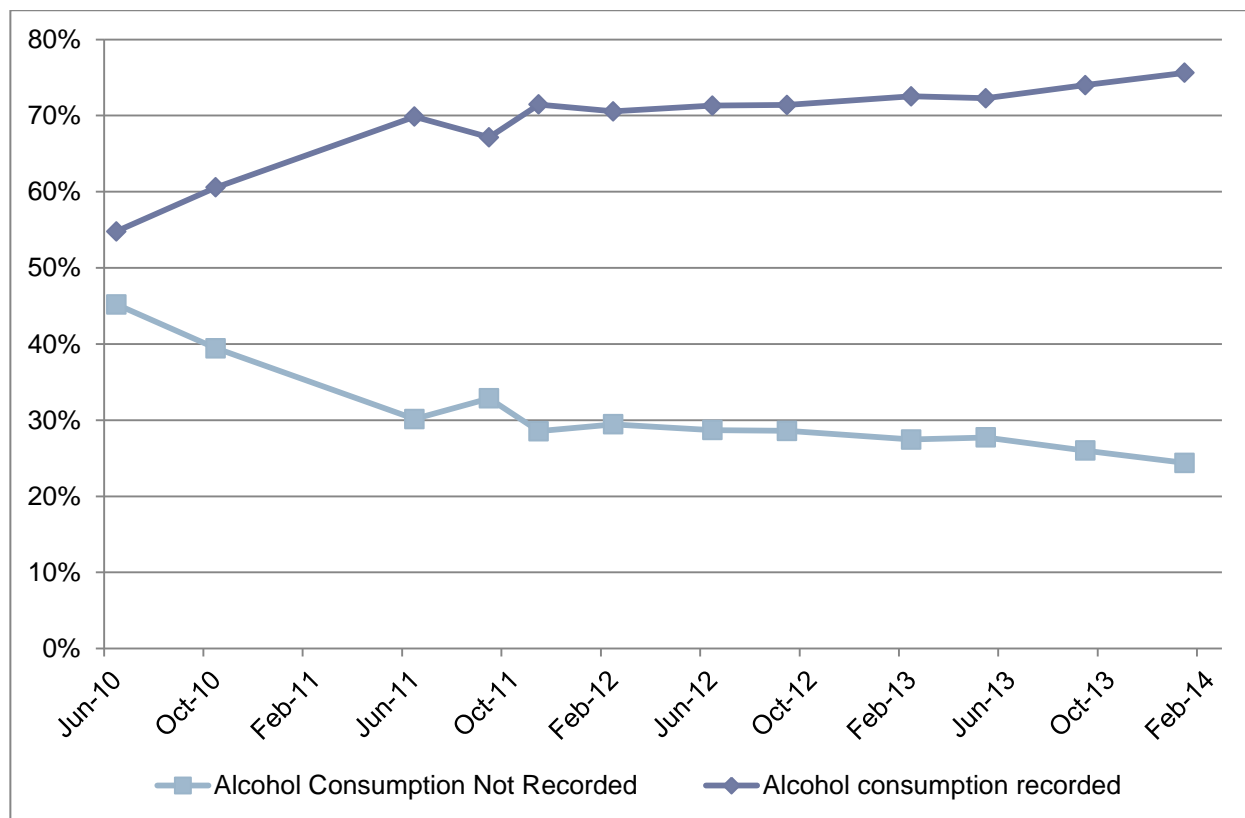
Smoker: self-reported daily smoking

Completeness of recording of smoking status: complete in 92% of adult records (See p 19)



## 2.7 Alcohol Consumption Recording

Alcohol consumption is the leading risk factor for injury burden in Indigenous Australians, contributing significantly also to mental health disorders (Vos, 2007). Over the period 2000-04 in Queensland, Western Australia, South Australia and the Northern Territory, Aboriginal and Torres Strait Islander males died from alcohol related causes at 7 times the rate of non-Indigenous males. Females died from causes related to alcohol use at 10 times the rate of non-Indigenous females (AIHW, 2006).



Proportion of regular Indigenous adult patients with alcohol consumption recorded over time

### Results of Regular Indigenous Clients:

- Of 13,976 adults seen\*, 10,569 (76%) were screened for alcohol consumption
- Recording rates varied across services from 39% to 97%

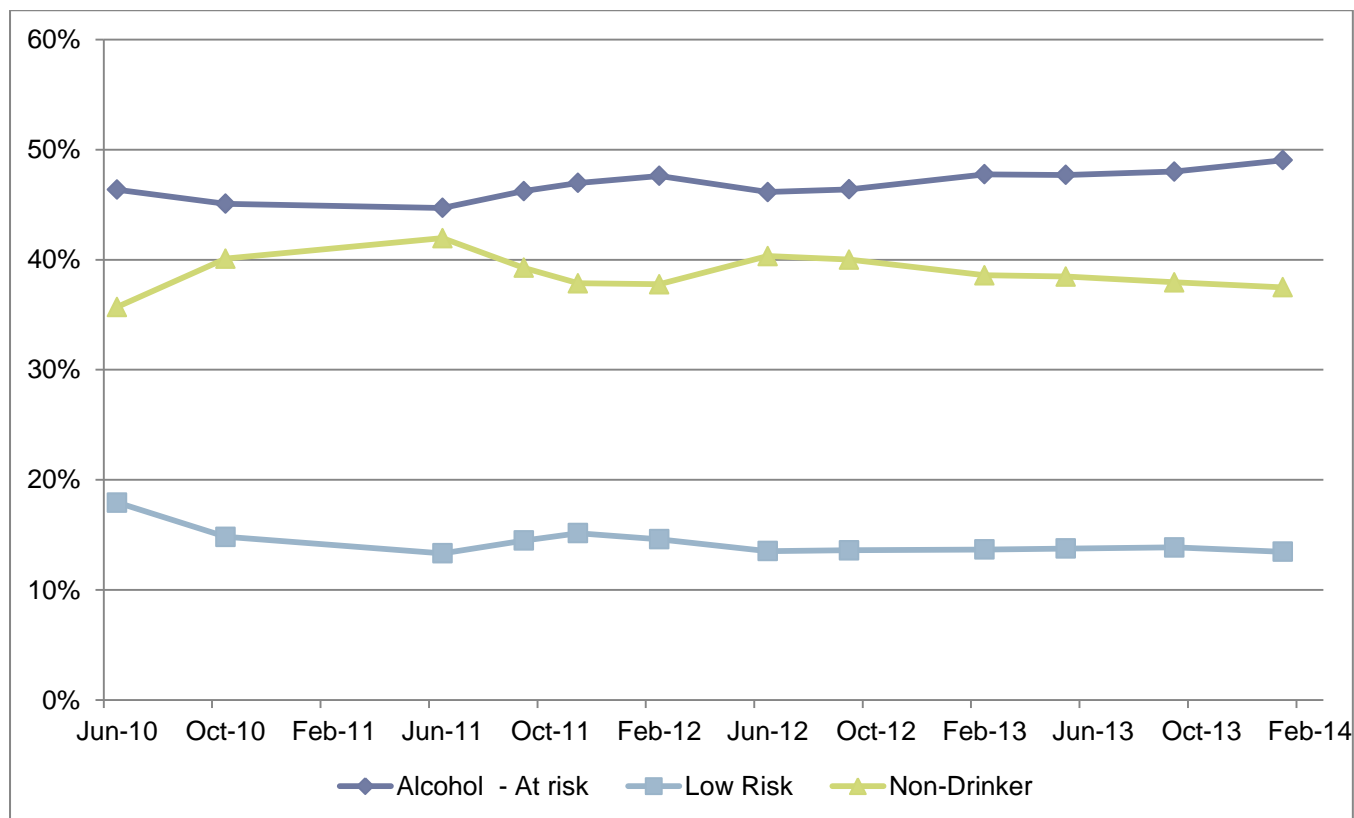
### The Gaps: Monitoring Performance: Screening

Alcohol use recorded - Very Good

\*Services using Communicare do not have the capability to submit alcohol related information and were therefore excluded from the totals

## 2.8 At Risk Alcohol Consumption

Alcohol consumption is the leading risk factor for injury burden in Indigenous Australians, contributing significantly also to mental health disorders (Vos, 2007). Over the period 2000-04 in Queensland, Western Australia, South Australia and the Northern Territory, Aboriginal and Torres Strait Islander males died from alcohol related causes at 7 times the rate of non-Indigenous males. Females died from causes related to alcohol use at 10 times the rate of non-Indigenous females (AIHW, 2006).



Proportion of regular Indigenous adult patients by alcohol consumption risk over time

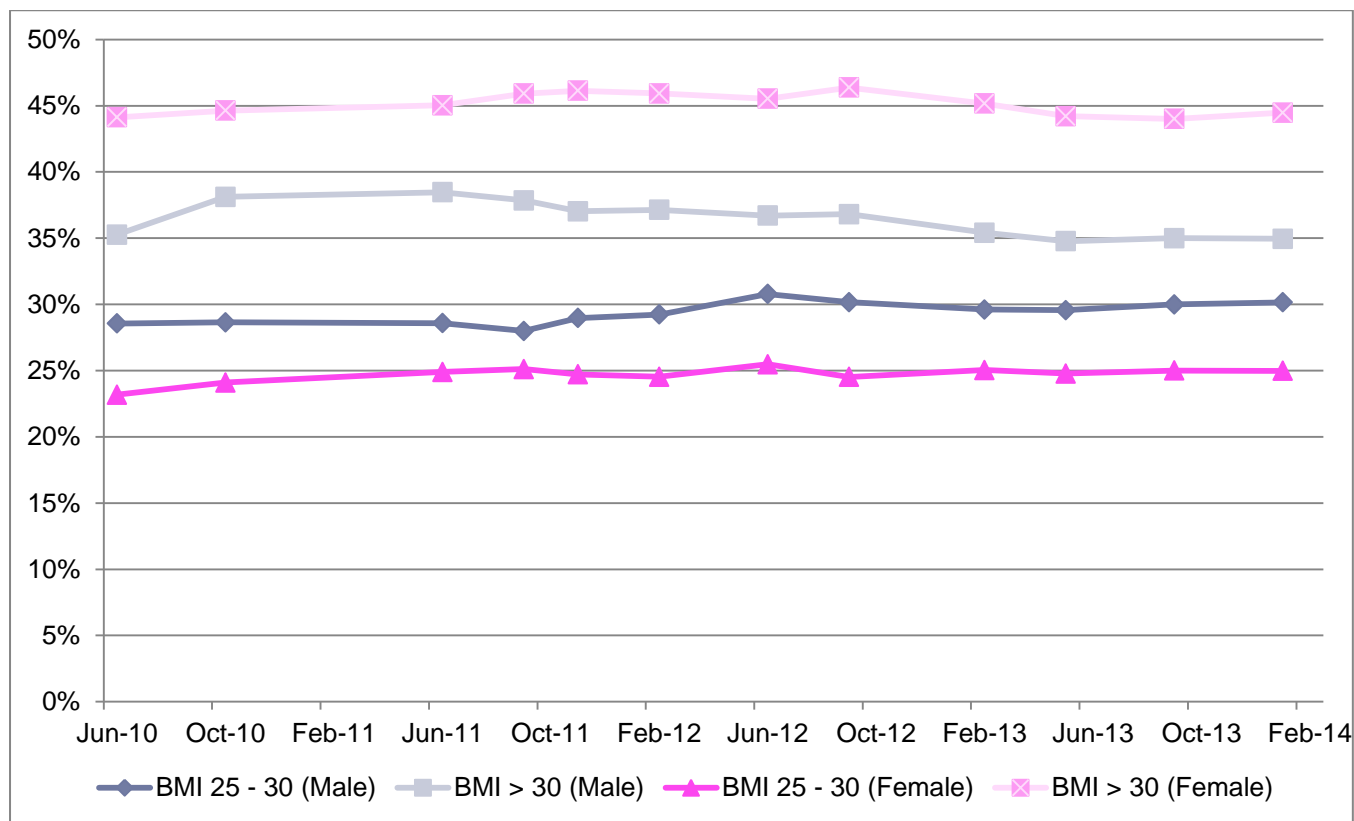
### Results of Regular Indigenous Clients:

- Of 10,569 adults screened for alcohol consumption, 5,182 (49%) were 'at risk' alcohol users
- Rates varied across services from 23% to 61%

\*Services using Communicare do not have the capability to submit alcohol related information and were therefore excluded from the totals. A drinker is at risk if they drink > 2 drinks on a regular occasion and/or binge drink (MD only which is currently recorded as >= 6 drinks on any occasion).

## 2.9 BMI Outcome by Gender

Obesity is the second highest risk factor contributing to the burden of chronic disease in Indigenous Australians, accounting for 11.4% of risk (Vos, 2007). Screening and brief intervention are key prevention activities that have been identified in the National Chronic Disease Strategy to improve nutrition, physical activity and levels of obesity that can be undertaken in adequately resourced ACCHSs.



Proportion of regular Indigenous adult patients with a BMI of (25-30, 30+)

### Results of Regular Indigenous Clients:

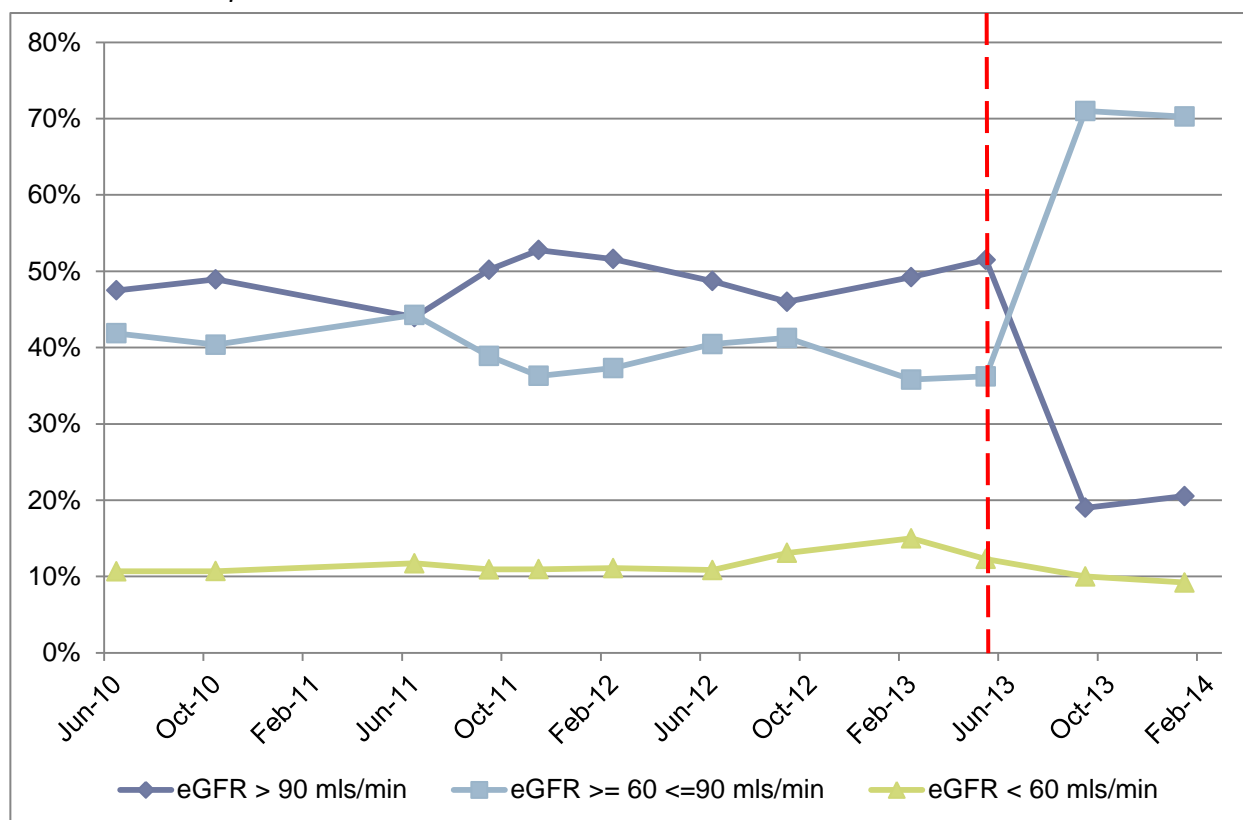
- Of 12,602 adults who had their BMI recorded, 3,414 (27%) were overweight and 5,115 (41%) were obese
- Of 5,147 adult males who had their BMI recorded, 1,552 (30%) were overweight; 1,799 (35%) were obese
- Of 7,455 adult females who had their BMI recorded, 1,862 (25%) were overweight; 3,316 (44%) were obese
- In Jan 2014, overweight rates varied across services from 21% to 35%
- In Jan 2014, obesity rates varied across services from 30% to 55%

A Body Mass Index (BMI) of 25 to 30 is classified as overweight; greater than 30 is classified as obese. Recording of both height and weight are necessary to calculate BMI.

### 3.0 eGFR Outcome

Aboriginal and Torres Strait Islander people suffer from renal disease at much higher rates than other Australians and it has reached epidemic proportions in some regions (Hoy et al, 2005). Renal disease is a complication of diabetes, hypertension and streptococcal infections and often goes unrecognized. The eGFR test is used to screen for and detect early kidney damage and to monitor kidney status. The higher the filtration rate, the better the kidneys are working. The test detects kidney disease in its early stages more reliably than the creatinine test alone.

*Note: The categorisation of Kidney Function indicators has undergone changes from June 2013, eGFR data should be interpreted with caution.*



**Proportion of regular Indigenous adult patients by eGFR level**

#### Results of Regular Indigenous Clients:

- Of 16,503 adult patients seen, 5,648 (34%) had their eGFR levels recorded
- In January 2014, recording rates varied across services from 15% to 52%
- Of 5,648 adults with eGFR levels recorded, 520 (9%) had eGFR levels of <60 mls/min

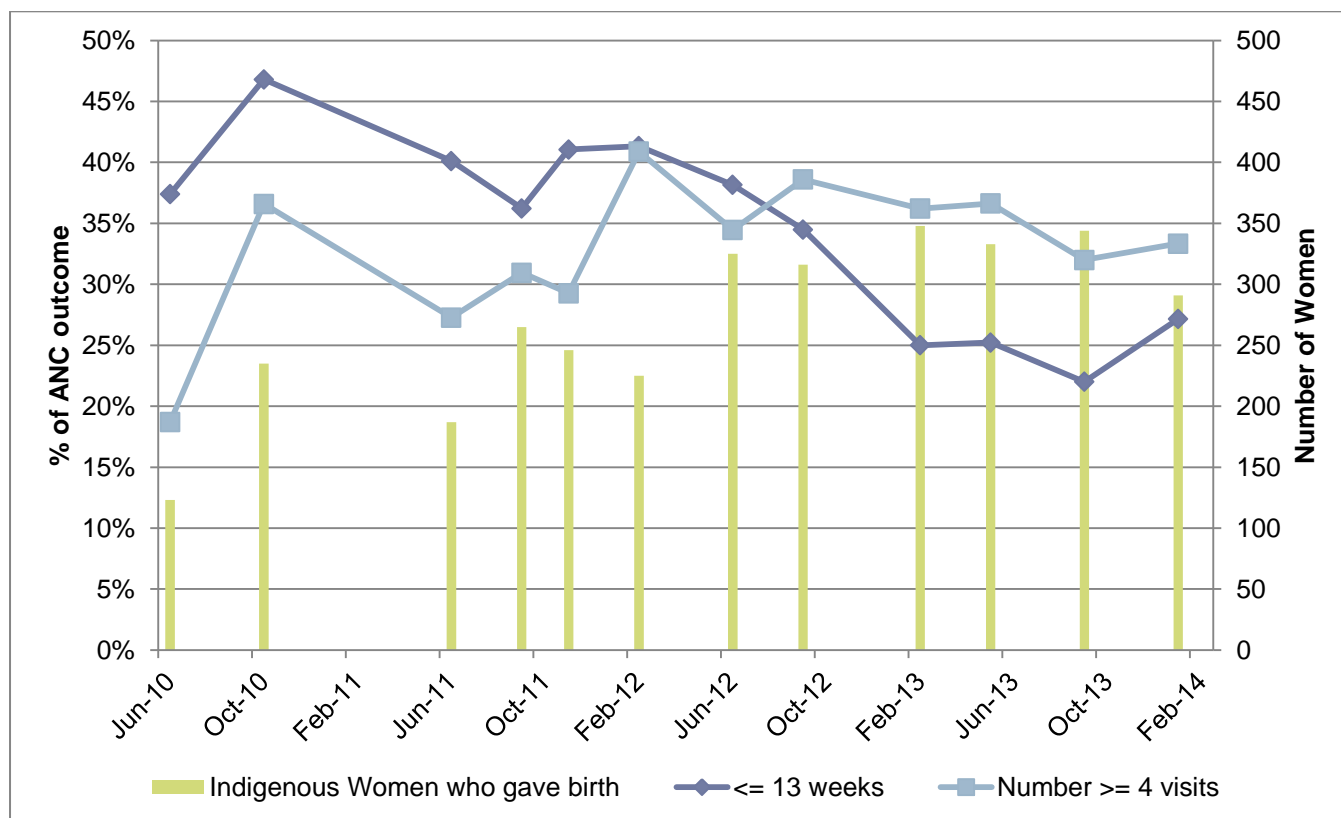
eGFR – Glomerular Filtration Rate is extracted from pathology results. eGFR >90 mls/min = normal/good. eGFR >=60<=90 mls/min = mild decrease in kidney function. eGFR <60 mls/min = bad, severe kidney function/failure.

### 3.1 Antenatal Care Delivery

The provision of antenatal care is a core primary health care responsibility of community controlled services. *Close the Gap* nominates a number of targets related to antenatal care including that all Indigenous women have access to appropriate Mother and Baby programs (HREOC, 2008).

Two key measures to assess performance are:

1. Timeliness of the 1<sup>st</sup> ANC visit
2. Proportion of women making 4 or more ANC visits with each pregnancy



**Number of regular Indigenous female patients who gave birth during the previous 6 months with an obstetric record in the EMR; who attended antenatal care at the service within the first 13 weeks of pregnancy; who attended 4 or more antenatal care visits at the service**

#### Results of Regular Indigenous Clients:

- 291 female patients gave birth during the previous 6 months
- In January 2014, the number varied of women giving birth across services from 0 to 72.
- Of 291 women who gave birth during the reporting period, 79 (27%) attended antenatal care within the first 13 weeks of pregnancy
- Of 291 women who gave birth during the reporting period, 97 (33%) attended 4 or more antenatal care visits
- There were 3,905 births to Indigenous mothers in Queensland (ABS, 2011)
- There were 5,256 Aboriginal and Torres Strait Islander births in Queensland (ABS, 2011)

Caution should be taken when interpreting this data due to small numbers - in 2014, only 4 services recorded more than 30 births and 11 services recorded less than 10 births.

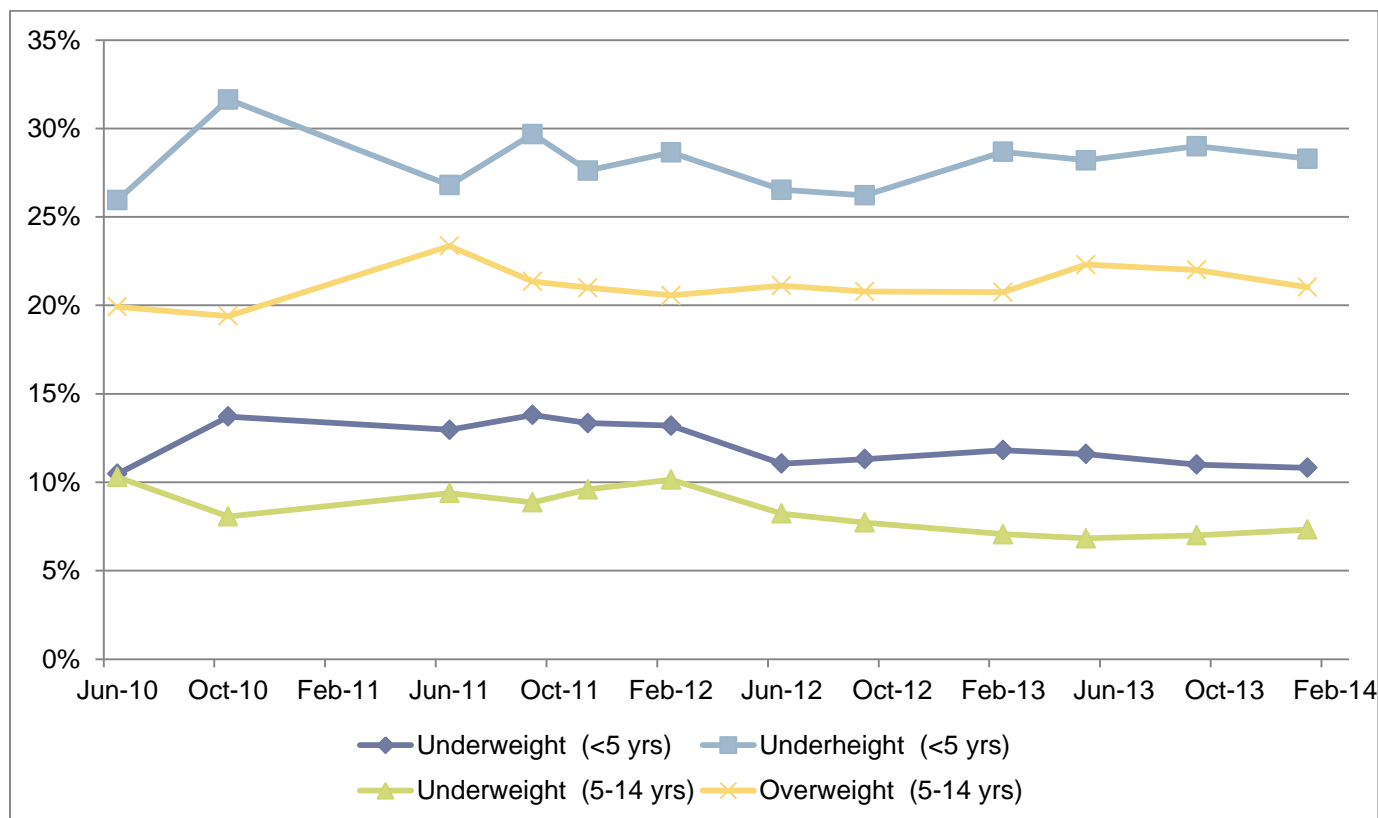
It is unclear at this point in time whether low numbers of births recorded are due to shared care arrangements with Queensland Health Antenatal teams.

Timely antenatal care (first visit) <= 13 weeks; adequate antenatal care (number of visits) >= 4 visits.

### 3.2 Underheight and Underweight Children Aged Less Than 5 years; Underweight and Overweight Children and Adolescents Aged 5-14 years

Obesity in children and adolescents is a major concern, not only because of health and social problems in the short term, but also there is a high risk it may continue into adulthood and affect long term health (AIHW, 2004).

Height is recorded for calculating BMI but it is also a measure of 'failure to thrive'.



**Proportion of regular Indigenous child patients aged less than 5 years and 5 to 14 years underweight, underheight and overweight**

#### Results of Regular Indigenous Clients:

- Of 4,393 children seen aged 5 to 14 years, 2,402 (55%) had their weight and height measurements recorded
- Of 3,404 children seen aged less than 5 years, 2,366 (70%) had their weight measurement recorded
- Of 2,366 children seen aged less than or equal to 5 years with a weight measurement recorded, 256 (11%) were underweight
- Of 2,131 children seen aged less than 5 years with a height measurement recorded, 603 (28%) were underheight
- Of 2,402 children seen aged 5 to 14 years with a weight and height measurement recorded, 176 (7%) were underweight
- Of 2,402 children seen aged 5 to 14 years with a weight and height measurement recorded, 505 (21%) were overweight

Recording of both height and weight are necessary to calculate BMI. Underweight – BMI below 5<sup>th</sup>ile; Overweight – BMI above 95<sup>th</sup>ile. The indicators compare the measurements against the 5<sup>th</sup> and 95<sup>th</sup> percentile of the WHO growth charts. These are available at <http://www.who.int/childgrowth/standards/en/index.html>

## REFERENCE LIST

AIHW: Leeds KL, Gourley M, Laws PJ, Zhang J, Al-Yaman F & Sullivan EA 2007. Indigenous mothers and their babies, Australia 2001–2004. AIHW cat. no. PER 38. Perinatal statistics series no. 19. Canberra: AIHW.

Australian Health Ministers' Advisory Council 2006. Aboriginal and Torres Strait Islander Health Performance Framework Report 2006. Canberra, AHMAC.

Ford J, Nassar N, Sullivan EA, Chambers G & Lancaster P 2003. Reproductive health indicators Australia 2002. AIHW Cat No. PER 20. Canberra: AIHW NPSU.

Hoy WE, Kondalsamy-Chennakesavan S, Scheppingen J, Sharma S, Katz I 2005. A chronic disease outreach program for Aboriginal communities. *Kidney International*. 68, S76–S82.

Human Rights and Equal Opportunity Commission 2008. Close the Gap. National Indigenous Health Equality Targets.

Mathur S, Moon L, Leigh S 2006. Aboriginal Torres Strait Islanders with coronary heart disease – summary report. Canberra, AIHW.

National Aboriginal Community Controlled Health Organisation 2005. National guide to a preventative health assessment in Aboriginal and Torres Strait Islander peoples. Melbourne, RACGP.

Panaretto KS, Gardner KL, Button S, et al. Prevention and management of chronic disease in Aboriginal and Islander Community Controlled Health Services in Queensland: a quality improvement study assessing change in selected clinical performance indicators over time in a cohort of services. *BMJ Open* 2013;3:e002759.doi:10.1136/bmjopen-2012-002083

Queensland Health. *The Health of Queenslanders 2010. Third Report of the Chief Health Officer Queensland*. Brisbane 2010.

Vos T, Barker B, Stanley L, Lopez AD 2007. The burden of disease and injury in Aboriginal and Torres Strait Islander peoples 2003. Brisbane: School of Population Health, The University of Queensland.

## APPENDIX 1 – HISTORY of the ACE Program

### 2007-8

- QAIHC Clinical Centre for Research Excellence (CCRE) funded by the Office of Aboriginal and Torres Strait Islander Health (OATSIH) to undertake the Health Information Project (HIP). The HIP\* project developed a minimum health information data set to monitor and report health outcomes and support clinical quality improvement.
- QAIHC Core Indicators, to monitor recorded prevalence and management performance on a number of key risk factors, clinical care activities and chronic diseases.

### 2009

- QAIHC Core Indicators set coded as a report in PEN Clinical Auditing Tool (CAT)<sup>TM</sup> system which is web-based and integrates with the AICCHS clinical Electronic Medical Record systems (EMRs) – Operational October 2009,
- Service Level Agreements were developed and signed by all involved. The QAIHC Core Indicators were incorporated
- October 2009, 6 services submit data to QAIHC
- EMR systems integrated with PEN CAT – Medical Director, Best Practice

### 2010

- Close the Gap Collaborative (Continuous Quality Improvement- CQI) program commences July 2010 in 22 services.
- Data submission process fully automated for 13 services

### 2011

- EMR systems integrated with PEN CAT – Communicare, Medical Director, Best Practice
- Data submission to QAIHC and for CtG Collaborative automated for all services
- Collaborative workshops held in April and October

### 2012

- Review of data governance protocols
- Benchmarking Report 3 released (July, 2012)
- External Report 1 released (Nov, 2012)
- 5 Regional Profile Reports created
- Collaborative workshops held in May and October

### 2013

- Development and automation of individual AICCHS Push Reports
- Benchmarking Report 4 released (May, 2013)
- New Data agreements with participating services
- 15 Practice Health Atlas and 17 executive summaries completed to date
- 5 Regional Profile Reports created
- CtG Collaborative name changed to AICCHs Clinical Excellence (ACE) Program



## APPENDIX 2 – Queensland data of services involved in the ACE program (Jan 2014)

### AICCHS using EMRS: Best Practice, Communicare and MD

<b>All Patients*</b> <b>57,412**</b>	<b>Recent Patients</b> <b>33,774</b>	<b>Regular Patients</b> <b>28,835</b>
<b>Indigenous</b> <b>43,942 (77%)</b>	<b>Indigenous</b> <b>26,882 (80%)</b>	<b>Indigenous</b> <b>23,426 (81%)</b>
Non-Indigenous 11,743 (20%)	Non-Indigenous 6,892 (20%)	Non-Indigenous 5,409 (19%)

\*All patients is at least 1 visit in 2 years

\*\*Includes Indigenous Status not stated =1,727 (3%)

### As above as well as 2 Mainstream services

<b>All Patients*</b> <b>65,512**</b>	<b>Recent Patients</b> <b>39,033</b>	<b>Regular Patients</b> <b>33,461</b>
<b>Indigenous</b> <b>45,239 (69%)</b>	<b>Indigenous</b> <b>27,839 (71%)</b>	<b>Indigenous</b> <b>24,300 (73%)</b>
Non-Indigenous 18,103 (28%)	Non-Indigenous 11,194 (29%)	Non-Indigenous 9,161 (27%)

\*All patients is at least 1 visit in 2 years

\*\*Includes Indigenous Status not stated =2,170 (3%)

### As above as well as 2 AICCHS using MMEx

<b>All Patients*</b> <b>75,123**</b>	<b>Recent Patients</b> <b>43,518</b>	<b>Regular Patients<sup>#</sup></b> <b>33,461</b>
<b>Indigenous</b> <b>51,568 (69%)</b>	<b>Indigenous</b> <b>30,733 (71%)</b>	<b>Indigenous<sup>#</sup></b> <b>24,300 (73%)</b>
Non-Indigenous 20,837 (28%)	Non-Indigenous 12,516 (29%)	Non-Indigenous <sup>#</sup> 9,161 (27%)

\*All patients is at least 1 visit in 2 years

\*\*Includes Indigenous Status not stated =2,718 (4%)

<sup>#</sup>MMEx data not available for Regular Patients